Page 112 of 162 4/20/83

RCRA RECORDS CENTER FACILITY HAT & Whitney-Main St. I.D. NOCTD990672061
FILE LOC. R-1B
OTHERROMS# 2452

IV Trial Burn Plan

A) Waste Analysis

There will be minor changes in waste compositions since they are a bulk composition of many waste streams. At the time of actual burn tests approximately 1000 cc of sample will be taken from just before the injection nozzle every 15 minutes and combined for a representative sample. This must be done to compare with exhaust stack results and show a 99.99% DRE.

1) Cyanide Waste Feed

A typical sample of concentrated cyanide waste yielded the following chemical analysis:

рΗ - 11.3 Solids - 190,000 mg/1 A1 -42 mg/1Cd- 144 mg/1Cr⁺⁶ -0 mq/1Total Cr - 18 mg/1-20 mg/1Co Cu -300 mg/1Fe -400 mg/1- 5840 mg/1 Νi -130 mg/1Ag Zn - 11 mg/l -57,500 mg/1Na - 42,500 mg/l K CN - 26,400 mg/1

Another sample had a cyanide (CN) content of 59,900 ppm.

Page 113 of 162 Revised: 12/20/83

This is an aqueous solution with no heating value and flow characteristics of water. These are inorganic plating solution wastes therefore there are no POHC's in the waste. EPA Hazardous Waste Numbers are F007, F008, and F009. The following hazardous constituents may be included in the waste solution:

P029 Copper Cyanide

P106 Sodium cyanide

P030 Cyanides

P074 Nickel cyanide

P098 Potassium cyanide

An analysis was performed for a subsequent sample of cyanide waste in order to account for the organics that might be contained in the cyanide waste stream. From the sample, taken from a waste cyanide bulk storage tank, analyticial results were as follows:

CN - 21,300 mg/1

Purgable Organics - less than .1 ppm for each parameter

analyzed

Oil and Grease -

48 mg/l

TOC -

3.88%

TOX -

less than .01 ppm

The analytical results are attached to Exhibit BB.

2) Wax/Oil/Solvents waste feed

A typical sample of this waste yielded the following chemical analysis.

Wax - straight chain paraffinic hydrocarbon wax 75%

Solvent - supernatant

25%

Refer to Exhibit BB (2 pages) for analysis of the supernatant.

This is an aqueous solution with no heating value and flow characteristics of water. These are inorganic plating solution wastes therefore there are no POHC's in the waste. EPA Hazardous Waste Numbers are F007, F008, and F009. The following hazardous constituents may be included in the waste solution:

P029 Copper Cyanide

P106 Sodium cyanide

P030 Cyanides

P074 Nickel cyanide

P098 Potassium cyanide

2) Wax/Oil/Solvents waste feed

A typical sample of this waste yielded the following chemical analysis.

Wax - straight chain paraffinic hydrocarbon wax 75%

Solvent - supernatant 25%

Refer to Exhibit BB (2 pages) for analysis of the supernatant.

The average heating value of this waste is 7500 BTU/lb. To pump this wax into the incinerator it is heated to 140°F at which temperature it has a viscosity of approximately 35 SSU.

The wax/oil/solvent mixture is variable containing the constituents as described in Section B III E and F. The following constituents and their respective EPA hazardous waste numbers are most likely to be designated as POHC's:

Page 113A of 162 New: 12/20/83

An additional sample was taken from the heated and mixed waste wax/solvent tank. In order to account for the organic constituents in this waste stream, an analysis was performed as follows:

Solid Portion (80% of sample), identified as paraffin wax. TOC - 64.8%

Liquid Portion (20% of sample)

Water Content - 85%

Tetrachloroethylene 15% (No other significant organics detected).

TOC - 2.21%

The analytical results are attached to Exhibit BB.

The average heating value of this waste is 7500 BTU/lb. To pump this wax into the incinerator it is heated to 140^{0}F at which temperature it has a viscosity of approximately 35 SSU.

The wax/oil/solvent mixture is variable containing the constituents as described in Section B III E and F. The following constituents and their respective EPA hazardous waste numbers are most likely to be designated as POHC's:

1.	1,1,2,2-Tetrach loroethy lene,	U210
2.	l,l,l-Trichlorœthane	U226
3.	Carbon Tetrachloride	U211
4.	Trichloroethylene	U228
5.	Methylene Chloride	U0 80

Only constituents 1 and 2 above are likely to be present in substantial quantities during incineration of these waste mixtures.

3) Waste Solvent Mixture

A third stream similar to that in Section 0 IV A(2) except without the wax will be burned. The solvents could include any or all of the constituents as described in Section B III F. Rates of generation are unpredictable but the following constituents and their respective EPA hazardous waste numbers are most likely to be designated as POHC's:

1.	1,1,2,2-letrach loroethy lene,	U2 I U
2.	1,1,1-Trichloroethane	U226
3.	Carbon Tetrachloride	U211
4.	Trichloroethylene	U228
5.	Methylene Chloride	08 OU

Only constituents 1 and 2 above are likely to be present in substantial quantities during incineration of these waste mixtures.

B) Sampling and Monitoring Procedures

Page 115 of 162 Revised: 11/30/83

During test runs the following points will be monitored and recorded every five minutes:

- 1. Primary chamber temperature from the thermocouple in the chamber connected to the control panel indicating controller.
- 2. Secondary chamber temperature from the thermocouple in the chamber connected to the control panel indicating controller.
- 3. Waste stream flow rate-from indicating meters on the control panel.
- 4. Pressure at inlet of the waste heat boiler from installed water manometer at that point.
- 5. Differential pressure across the venturi scrubber from water manometer installed at that point.
- 6. Velocity pressure measurements for combustion gas.

Temperature at the exit of the incinerator is continuously recorded on a 24 hour circular chart recorder.

The exhaust gases are monitored from three test ports installed in the exhaust stack 30° above the roof of the building. Refer to Exhibit W page 5. Gases are sampled through these test ports 5 minutes per location point as located on Exhibit X. The sampling test equipment and set up are shown in Exhibit Y.

The following tests will be conducted on the exhaust stack gases by a qualified testing company.

1. Isokinetic Particulate Emission Tests per EPA Methods 1, 2, 3, 4, and 5. They will measure flow, temperature, moisture, static

During test runs the following points will be monitored and recorded every five minutes:

- 1. Primary chamber temperature from the thermocouple in the chamber connected to the control panel indicating controller.
- 2. Secondary chamber temperature from the thermocouple in the chamber connected to the control panel indicating controller.
- 3. Waste stream flow rate-from indicating meters on the control panel.
- 4. Pressure at inlet of the waste heat boiler from installed water manometer at that point.
- 5. Differential pressure across the venturi scrubber from water manometer installed at that point.

Temperature at the exit of the incinerator is continuously recorded on a 24 hour circular chart recorder.

The exhaust gases are monitored from three test ports installed in the exhaust stack 30" above the roof of the building. Refer to Exhibit W page 5. Gases are sampled through these test ports 5 minutes per location point as located on Exhibit X. The sampling test equipment and set up are shown in Exhibit Y.

The following tests will be conducted on the exhaust stack gases by a qualified testing company.

1. Isokinetic Particulate Emission Tests per EPA Methods 1, 2, 3, 4, and 5. They will measure flow, temperature, moisture, static

pressure, etc., as required to determine the emission rate in lbs/hr. and grains/scfd corrected to 50% excess combustion air based on oxygen levels. Gas samples will be taken upstream of the scrubber for subsequent Orsat analysis in order to determine an accurate gas density and the $\rm CO_2$, $\rm CO$, $\rm O_2$ and $\rm N_2$ levels. Also Bacharach $\rm CO_2$ samples will be taken periodically during the test to verify the incinerator performance. Refer to Exhibit Z (2 pages) for a description of Test Procedures.

- Opacity measurements will be made by an EPA Certified Observer.
 The test operators will also check for odors at the stack.
- 3. Four grab samples per test run will be taken to test for NO_X per EPA Method 7. This will be reported as NO_2 . Refer to Exhibit AA (4 pages) for a description of Test Procedures.
- 4. Separately test both the Method 5 filter and the impinger contents for the following metals to the ppm V level on an Atomic Absorption Spectrophotometer; Al, Be, Na, Cd, Va, Cr, Cu, Fe, Pb, Mn, Ni and Zn. Also pH readings will be made from these samples.
- 5. A separate sampling train with filter and impingers will be used to test for hydrogen halides per EPA approved Method Results will be reported as HC1. This test will only be run for waxes and solvents.

Scrubber water is a closed loop system that must be drained periodically. Before draining, this water will be checked for cyanide and solvents and if found clear will be discharged to a NPDES permitted system.

Page <u>117 of 162</u> Revised: 11/30/83

C) Detailed Test Schedule

The date for scheduling the trial burns has not been set because preliminary tests performed by the manufacture for the State of Connecticut have shown high particulate levels. An analysis of the particulate was made by the manufacturer to determine what the particulates were so he could correct the problem. The particulate tested as 100% inorganic with the primary particulate being NaCl. This is carry-over from the scrubber water and a second demister section is due to be installed. The trial burns when scheduled will consist of three individual one hour burns for each waste tested as indicated in section B above. Each test will be run at a minimum temperature of 1832° F and at the maximum design rate of 48 gph to prove the capacity of the incinerator. No trial burn will be scheduled before a test protocol has been submitted and a pretest conference held.

D) Detailed Test Protocol

Bids are being solicited for the writing of the detailed test protocol and the test program. This test protocol is expected to be complete in early March 1984 with testing to proceed upon approval. The protocol will be written to exempt the cyanide wastes on the basis 1. There are no POHC's, 2. Cyanide decomposes at a temperature well below incinerator operating temperature and 3. Particulate and NO_{χ} test results will be available from Connecticut Air Quality test programs.

The wax and solvent tests will be based on a synthetic mix of wax and the highest ranking OHC from Part 261 Appendix VIII found in sampling tests.

C) Detailed Test Schedule

The date for scheduling the trial burns has not been set because preliminary tests performed by the manufacture for the State of Connecticut have shown high particulate levels. An analysis of the particulate was made by the manufacturer to determine what the particulates were so he could correct the problem. The particulate tested as 100% inorganic with the primary particulate being NaCl. This is carry-over from the scrubber water and a second demister section is due to be installed. The trial burns when scheduled will consist of three individual one hour burns for each waste tested as indicated in section B above. Each test will be run at a minimum temperature of 1832^{OF} and at the maximum design rate of 47 gph to prove the capacity of the incinerator.

D) Detailed Test Protocol

For both wastes scheduled to be burned the operating parameters are the same except for use of auxillary fuel. The operating parameters are:

- 1. Incinerator combustion temperature of $1832^{\circ}F$ to $2000^{\circ}F$.
- 2. Flow rate of 47 gph maximum.
- 3. Differential pressure across the venturi scrubber of 26-30" $\rm H_2O$.
- 4. Scrubber water pH of 7.5 to 8.5.
- 5. Negative pressure of 0.25 to 0.5" $\rm H_2O$ before the waste boiler.
- 6. CO level in the exhaust stack of 50 ppm maximum.
- 7. Because there is no heating value in the cyanide waste the

Page 118 of 162 Revised: 11/30/83

For wastes scheduled to be burned the operating parameters are:

- 1. Incinerator combustion temperature of 1832 F to 2000 F.
- 2. Flow rate of 48 gph maximum.
- 3. Differential pressure across the venturi scrubber of 26-30" $\rm H_2O$.
- 4. Scrubber water pH of 7.0 to 8.5.
- 5. Negative pressure of 0.25 to 0.5" H₂0 before the waste boiler.
- 6. 00 level in the exhaust stack of 50 ppm maximum.
- 7. Because there is no heating value in the cyanide waste the auxillary fuel burners remain on and proportionally control as required from the set point of the controllers. With the BTU value of the wax/solvent when the feed pump is energized one of the two primary burners is turned off, but its modulating air continues on to insure enough combustion air for complete combustion of the wax.

E) Emission Control Equipment Operating Conditions

Fugitive emissions are controlled by maintaining the system under negative pressure. This is monitored with a water manometer between the incinerator and waste heat boiler. This also indicates whether the boiler tubes are free and clean.

auxillary fuel burners remain on and proportionally control as required from the set point of the controllers. With the BTU value of the wax/solvent when the feed pump is energized one of the two primary bruners is turned off, but its modulating air continues on to insure enough combustion air for complete combustion of the wax.

E) Emission Control Equipment Operating Conditions

Fugitive emissions are controlled by maintaining the system under negative pressure. This is monitored with a water manometer between the incinerator and waste heat boiler. This also indicates whether the boiler tubes are free and clean.

F) Emergency Procedures

The system microprocessor continuously scans all alarm points and automatically shuts the incinerator down on the following schedule.

If the negative pressure at the inlet to the main induction blower is not high enough the waste feed pumps, solenoid valve in feed lines and the burners will shut down and the system will automatically switch to the back-up blower for system cool down. There is no system by pass.

Page 119 of 162 Revised: 11/30/83

F) Emergency Procedures

The system microprocessor continuously scans all alarm points and automatically shuts the incinerator down on the following schedule.

- 1. If the negative pressure at the inlet to the main induction blower is not high enough the waste feed pumps, solenoid valve in feed lines and the burners will shut down and the system will automatically switch to the back-up blower for system cool down. There is no system by pass.
- 2. If any of the following happen the burners and pump will shut down, solenoid valves will close, and the alarm horn will sound:
 - a) Secondary combustion chamber temperature drops below 1832^{0} F.
 - b) Flow rate exceeds 0.8 gpm.
 - c) Scrubber water pH drops below 7.0.
 - d) ∞ in the stack exhaust gas exceeds 50 ppm.
 - e) Lose control air pressure.

Any malfunction, besides sounding the alarm horn, will indicate the source with lights on the panel. To resume normal operation there is a manual reset button that must be pushed. The system will not reset unless the cause of the malfunciton alarm has been rectified.

- 2. If any of the following happen the burners and pump will shut down, solenoid valves will close, and the alarm horn will sound:
 - a) Combustion chamber temperature drops below 1800°F.
 - b) Flow rate exceeds 0.8 gpm.
 - c) Scrubber water pH drops below 7.5.
 - d) CO in the stack exhaust gas exceeds 50 ppm.
 - e) Lose control air pressure.

Any malfunction, besides sounding the alarm horn, will indicate the source with lights on the panel. To resume normal operation there is a manual reset button that must be pushed. The system will not reset unless the cause of the malfunction alarm has been rectified.

TABLE OF ACRONYMS

ACFM	Actual Cubic Feet per Minute
ACFS	Actual Cubic Feet per Second
ASTM	American Society Testing Materials
BTU	British Thermal Unit
CFR	Code of Federal Regulations
CWTP	Concentrated Waste Treatment Plant
DEP	Connecticut Department of Environmental Protection
DOT	U.S. Department of Transportation
DRE	Destruction Removal Efficiency
EPA	US Environmental Protection Agency
ID #	Identification Number
MCL	Materials Control Laboratory
MERL	Materials Engineering Research Laboratory
MM BT U	Million BTU
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PM	Preventive Maintenance
PMC	Process Material Control Specifications
POHC	Primary Organic Hazardous Constituents
PS	Process Solution Specifications
PWA	Pratt & Whitney Aircraft
RCRA	Resource Conservation and Recovery Act
TSDF	Treatment Storage Disposal Facility
UTC	United Technologies Corporation

CERTIFICATION

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

UNITED TECHNOLOGIES CORPORATION

Pratt & Whitney Aircraft Group

Manufacturing Division

DATE 4/20/83

SIGNATURE

Executive Vice President

Page 162A of 162 New: 11/30/83

CERTIFICATION

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in the revisions to this document, dated 11/30/83 and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

UNITED TECHNOLOGIES CORPORATION

Pratt & Whitney Aircraft Group

Manufacturing Division

DATE November 30,1983

SIGNATURE

hn P. Balaguer

Executive Vice President

APPENDICES

APPENDIX I

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) HAZARDOUS WASTE MANAGEMENT FACILITY - PART A APPLICATION REVISION

Revised: 11/30/83

This RCRA Part A Application revision is required to be consistent with the Part B Application submission. The following is a summary of the changes and reasons they were made:

- 1. All treatment tanks (process code TO1) have been removed, due to exclusions under 40 CFR 122.21(d)(2)(vi) and 264.1(g)(6).
- 2. The rotary kiln incinerator listed in the November 19, 1981 previous Part A revision has been removed from the application. This incinerator will not burn any hazardous waste.
- Section IV "Description of Hazardous Wastes" has been revised according to latest regulations.
- 4. Section III surface impoundments (process code SO4) has been deleted from the November 18, 1980 Part A Application in both this revision and our previous revision dated November 19, 1981. No wastes were added to any of the impoundments since 1976. The impoundments were emptied and the wastes were reprocessed through the PWA Colt Street site (EPA ID No. CTD 00844399) for storage and subsequent disposal at the PWA Metal Hydroxide Landfill in Middletown, Connecticut (EPA ID No. CTD 003935904).

APPENDIX I

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) HAZARDOUS WASTE MANAGEMENT FACILITY - PART A APPLICATION REVISION

This RCRA Part A Application revision is required to be consistent with the Part B Application submission. The following is a summary of the changes and reasons they were made:

- 1. All treatment tanks (process code TO1) have been removed, due to exclusions under 40 CFR 122.21(d)(2)(vi) and 264.1(g)(6).
- 2. The rotary kiln incinerator listed in the November 19, 1981 previous Part A revision has been removed from the application. This incinerator will not burn any hazardous waste.
- Section IV "Description of Hazardous Wastes" has been revised according to latest regulations.

FORM			CTION AGENCY I. EPA I.D. N	UMBER					
	SEP	A Co.	nsoli	deted	Permits P		9 9 0 6 7		
GENERAL	ELITEMS	(Reda the	rener	U In	Tructions	CE GE	NERAL INSTRU	1.2.9	
(1.D)	NUMBER					it in the de	signated space. F	en provided, affix Review the inform-	
III. FACIL	ation carefully; if any of it is the state of the state o								
appropriate fill—in area below the preprinted data is absent									
V. MAILING ADDRESS PLEASE PLACE LABEL IN THIS SPACE left of the label space lists that should appear), please proper fill—in area(s) below.									
1	///		/		//,	complete an	nd correct, you	need not complete except VI-B which	
FACIL			/	/	//,	must be co	empleted regardl	less). Complete all provided, Refer to	
VI. LOCA			/)	/	///	the instruc	tions for detail	led item descrip- thorizations under	
			\sum	\sum	77,		ata is collected.	CHOTIZOCIONA GAIGO	
	ANT CHARACT								
questions, if the supp	you must submit demental form is	this form and the supplement attached. If you answer "no"	al fo	rm li ach q	sted in the Juestion, y	submit any permit application forms to the parenthesis following the question. Mark "X ou need not submit any of these forms. You to, Section D of the instructions for definition	(" in the box in t may answer "no'	he third column If your activity	
13 excidued	· · · · · ·	UESTIONS			K 'X'			MARK 'X'	
			725	NO	ATTACHED	B. Does or will this facility (either existing	n or proposed)	YES NO FORM	
	results in a discl	cly owned treatment works harge to waters of the U.S.?	16	X	10	include a concentrated animal feeding aquatic animal production facility whi discharge to waters of the U.S.? (FORM	operation or ch results in a	X 19 20 21	
		currently results in discharges other than those described in	X	-	10	D. Is this a proposed facility (other than to in A or B above) which will result in		X	
	above? (FORM 20		22	23	24	waters of the U.S.? (FORM 2D) F. Do you or will you inject at this facilit		25 26 27	
	r will this facilit ous wastes? (FOR	ty treat, store, or dispose of M 3)	X	29	X 30	municipal effluent below the lowermos taining, within one quarter mile of underground sources of drinking water?	st stratum con- the well bore,	X 31 32 33	
		t at this facility any produced nich are brought to the surface				H. Do you or will you inject at this facility		3. 3. 3.	
		entional oil or natural gas pro- sed for enhanced recovery of		X		cial processes such as mining of sulfur process, solution mining of minerals, i	n situ combus-	X	
hydroc	arbons? (FORM 4		34	35	36	tion of fossil fuel, or recovery of geoti (FORM 4)	nermai energy?	37 38 39	
		ed stationary source which is all categories listed in the in-				J. Is this facility a proposed stationary a NOT one of the 28 industrial categori			
per yea	ar of any air p	vill potentially emit 100 tons ollutant regulated under the		Х		instructions and which will potentially per year of any air pollutant regulated u		X	
Clean / attainm	Air Act and may sent area? (FORM	y affect or be located in an 15)	40	41	42	Air Act and may affect or be located in area? (FORM 5)	ı an attainment	43 44 45	
III. NAME C	OF FACILITY		7	- ; -	1-1-				
1 SKIP P	R A T T	& W.H.I.T.N.E.Y	<i>E</i>	I	R C R	A.F.TG.R.O.U.PM.D.	&C.P.D	69	
IV. FACILI	TT CONTACT	A. NAME & TITLE (last, fir	st, &	title)	B. PHONE (area	code & no.)		
2 W I C	K.W.I.R.E.	JAMES D		. A	N T .	E N G 2 0 3 5 6 5	4_8_8_7		
V. FACILIT	Y MAILING AD	DRESS				45 46 - 48 40 - 5			
e) i		A. STREET OR P.O.	вох						
3 4,0,0	MAIN	STREET		· 	· · · · · · · · · · · · · · · · · · ·				
15 1 16	r	B. CITY OR TOWN				C.STATE D. ZIP CODE			
4 E A S	T HAR	TFORD	· ·	<u>'</u>	· · · ·	C T 0 6 1 0 8			
	TY LOCATION					eu (at az) a/			
<u> </u>	A. STREE	ET, ROUTE NO. OR OTHER S	PECI	FIC	IDENTIFI	ER			
54.0.0	MAIN	, ,S ,T ,R ,E ,E ,T ,			<u> </u>	45			
<u> </u>		B. COUNTY NAME	-	1	, , , , ,				
HART	FORD	<u> </u>				76		į	
E		C. CITY OR TOWN	-	1		D.STATE E. ZIP CODE F. COUI	NTY CODE		
6 E A S	T HAR	TFORD				C T 0 6 1 0 8	- 54		

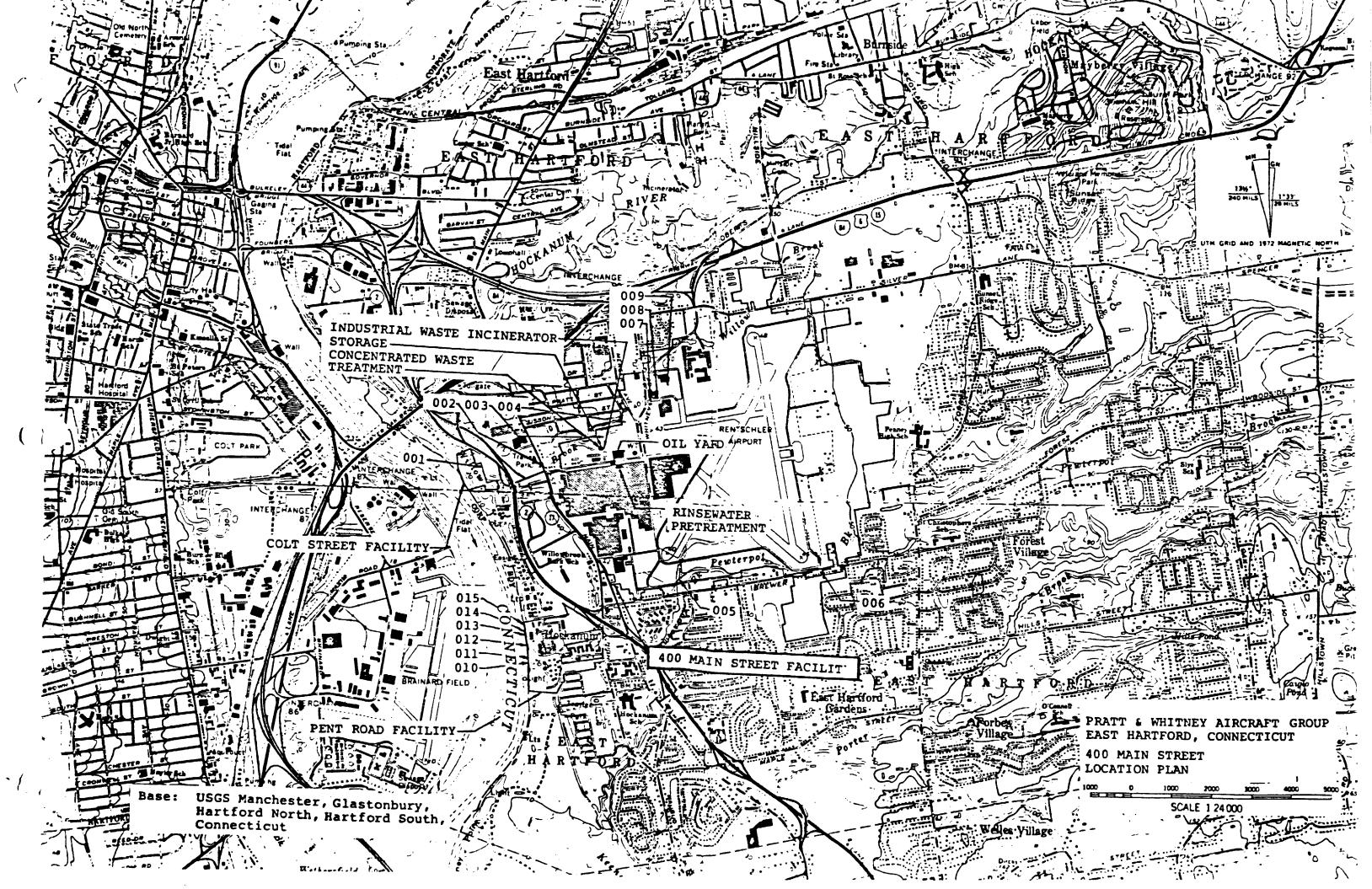
CONTINUED FROM THE FRONT						
VII. SIC CODES (4-digit, in order of priority)						
A. FIRST (specify) JET AIRCRAFT E	NCINEC	<u> </u>	(specify)	B. SECO	IND	
[7]3,7,2,4		7				
C. THIRD	10	11116		D. FOU	RTH	
(specify)		7	(specify)			
11 10 - 10		19 19	19			
VIII. OPERATOR INFORMATION					B. Is the	name listed
<u>e] </u>	A. N.	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	, , , , , , , , , , , , , , , , , , , 	 		VIII-A also t
8 UNITED TECH PR	A T T &	WHITN	E Y A I R	C R A F T		
18 16	_		<u> </u>		58 66	
C. STATUS OF OPERATOR (Enter the a)			f "Other", specify.)		D. PHONE (area code &	no.)
F = FEDERAL M = PUBLIC (other the 8 = STATE O = OTHER (specify)	in federal or state)	(specify)		A 2	0 3 5 6 5 4	8 8 7
P = PRIVATE	OR P.O. BOX	54			8 · 88 10 · 81 E	2 - 20
		, , , , , , , , , , , , , , , , , , , 	 			
400 MAIN STREET			L			
F. CITY OR TO)WN		G.STATE H. ZIP C	ODE IX. IND	AN LAND	
	7 7 7 7 7 7	7-1-1-1		0 0	cility located on Indian	lands?
B E A S T H A R T F O R D			C T 0 6 1	U 0 52	YES 🖾 NO	
X EXISTING ENVIRONMENTAL PERMITS		40	41 42 47 -	31		
A. NPDES (Discharges to Surface Water)	D. PSD (Ai	r Emissions from P	roposed Sources)			
CITI.	CTI					
9 N C T 0 0 0 1 3 7 6	9 P 18 18 17 18		30	i		
B. UIC (Underground Injection of Fluids)		E. OTHER (speci	fy)			
9 U	9 5 3	3 - 0 0 2 0		í .	NECTICUT STATE	
C. RCRA (Hazardous Wastes)	30 18 16 17 18	E. OTHER (speci	36	EM1	SSIONS PERMIT	
EIFIC TO THE TOTAL TOTAL TO THE TOTAL TOTAL TOTAL TO THE TOTAL T	671			(specify)		
9 R	9 5 3	3 <u>-001.7</u>		SEE	ATTACHMENT	
XI. MAP						
Attach to this application a topographic nather outline of the facility, the location of	each of its exist	ing and propose	d intake and disch	narge structure	s, each of its hazardo	us waste
treatment, storage, or disposal facilities, a water bodies in the map area. See instructi			ids underground.	include all spi	ings, rivers and other	r surface
XII. NATURE OF BUSINESS (provide a brief des	·	quirements.				
XII. NATURE OF BUSINESS (provide a brief des	scription)					
MANUFACTURER OF J	ET AIRCRAFT	ENGINES AND	ENGINE PART	rs.		
XIII. CERTIFICATION (see instructions)				ALCOHOLOGICAL SERVICES		, , , , , , , , , , , , , , , , , , ,
I certify under penalty of law that I have attachments and that, based on my inqu	personally exami	ined and am fam	iliar with the info	rmation submi	tted in this application	n and all
application, I believe that the information false information, including the possibility	n is true, accurate	and complete.	y responsible for I am aware that t	ootsining the there are signi	miornation contain ficant penalties for su	sa in the ibmitting
A. NAME & OFFICIAL TITLE (type or print)		B. SIGNATURE			C. DATE SIGN	1ED
J. P. Balaguer/Executive Vic	e President	- 77			4 /00 /00	
Manufacturing	Division	Wa	lacum		4/20/83	
COMMENTS FOR OFFICIAL USE ONLY						
	1 1 1 1 1 1	7 1 1 1 1	1 1 1 1 1			
100 100						

ATTACHMENT I, FORM I EPA I.D. NO. CTD99067081

X EXISTING ENVIRONMENTAL PERMITS (Cont'd)

E. OTHER

P 053-0022	CT	STATE	EMISSIONS	PERMI T
P 053 - 0024 ¹	11	#	Ħ	16
P 053 - 0025 ¹	11	11	H	#4
P 053-0019	**	16	11	11



rase print of type in the unshaded	areas n	n. v				
I-in areas are spaced for elite typ			nch).		Form Approv	ed OMB No. 158-S80004
DRM	LIA		ONMENTAL PROTE		I. EPA I.D.	NUMBER
	ПА		O VVAO I E PERM Consolidated Permits F	IT APPLICATION		7/4
CRA	(T			ection 3005 of RCRA.)	FCTD	9 9 0 6 7 2 0 8 1
R OFFICIAL USE ONLY						
ATION DATE RECEIVED				COMMENTS		
2VED (yr. mo. & day)	+					
SI W U		ON				
FIRST OR REVISED APPL					N	
						ere submitting for your facility or d application, enter your facility's
I.D. Number in Item I above.	, 		, a 2,, oo2, kmon , oo.	isomey server, i.e. wanted, or		
FIRST APPLICATION (place					,	
1. EXISTING FACILITY (See insi	ructions for detections to the litem below.	finition of "existing"	' facility.	DEHEW PA	EILITY (Complete item below.)
	=		•	DATE (yr., mo., & day)	/1	FOR NEW FACILITIES
OPE	RATIO	n began or		RUCTION COMMENCED	T- 1	TION DEGAR OR IS
12 70 79 77 79		es to the left)			72 20 73 7	TO BE EXPECTED TO BEGIN
EVISED APPLICATION (nd complete Item I at	ione)		
X 1. FACILITY HAS INTER	IM STA	TU\$			LA PACILIT	Y HAS A RCRA PERMIT
PROCESSES – CODES AN	D DE	SIGN CAPA	CITIES			
	PRO- CESS		ATE UNITS OF FOR PROCESS		PRO- CESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS
PROCESS	CODE	DESIGN	CAPACITY	PROCESS	CODE	DESIGN CAPACITY
oraga:				Treatment:		
NTAINER (barrel, drum, etc.) NK	501 502	GALLONS C		TANK	TOI	GALLONS PER DAY OR LITERS PER DAY
STE PILE	503	CUBIC YAR	DSOR	SURFACE IMPOUNDMEN	T T02	GALLONS PER DAY OR LITERS PER DAY
ACE IMPOUNDMENT	304	GALLONS		INCINERATOR	TOS	TONS PER HOUR OR METRIC TONS PER HOUR;
<u>#:</u>						GALLONS PER HOUR OR
JECTION WELL NOFILL	D79 D80	GALLONS C	OR LITERS (the volume that	OTHER (Use for physical, o	hemical T04	LITERS PER HOUR GALLONS PER DAY OR
		would cover depth of one	one acre to a	thermal or biological treatm processes not occurring in to	ent	LITERS PER DAY
AND APPLICATION	D\$1	HECTARE-	AETER	surface impoundments or in ators. Describe the processe	ciner-	
EAN DISPOSAL	D#2	GALLONS P	ER DAY OR	the space provided; Item II.	Ĩ.C.)	
RFACE IMPOUNDMENT	D83	GALLONS				
	UNI	r OF		UNIT OF		UNIT O
	MEAS			MEASURE		MEASUR
NIT OF MEASURE			UNIT OF MEASUR		UNIT OF A	
ALLONS		G L		V		T
JBIC YARDS JBIC METERS				t HOUR W		
ALLONS PER DAY		ũ	LITERS PER HOUR	F H		
AMPLE FOR COMPLETING IT	EM III	(shown in line	numbers X-1 and X-	2 below): A facility has two st	orage tanks, one	tank can hold 200 gallons and the
er can hold 400 gallons. The fac	anty all	TO A CIN TO	WARDER COM DUM N	IP ID 20 genons per nour.		
DUP		/////	/ / / / /		1 7 7 1	
			1.1.1.1.		777	
A. PRO- B. PROCESI	DESI	ON CAPACI		E A.PRO B.PR	acide plan	N-CAPACITY
CEE				THE CHAR		FOR

BURE SURE (exter code) CODE (from list shove) OF MEA SUPE (enter code) 1. AMOUNT S 0 2 600 G 0 3 20 E 6 7 0 1 G 68840 8 0 2 27300 G 3 9 0 3 48 E 10

FORM	9	EF	A
nuna			

U.S. ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS WASTE PERMIT APPLICATION Consolidated Permits Program

I.	EP.	ΑI	.D.	N	JM	BE	R	•						
\$		ı		Ţ			Г	· · · ·	Γ^{-}				T/A	U
Ü	C	т	D	9	9	lO.	6	17	2	n	R	1		1
ľ	Ľ.,	•	L	_	L	_	<u>_</u>	Ľ	1		L^{L}	1		1
	-													

	RA				(T	his infor	matio	n is requi	ired u	ınder	Secti	ion 3	005	of R	CI	RA.)	1 2 4 4				13	14.1	
				IAL USE ONLY																			
	PPR			(yr., mo., & day)	L	·								С	:01	MMENTS							_
-		3		24 - 29																			
II.	_		OI	R REVISED APPLI		ON																	Į
Plac	e ar	"X" app	('' ir lica	n the appropriate box tion. If this is your fir ber in Item I above.	in A or	B belov																	
A.	FIF	ST	AF	PPLICATION (place	an "X	'' below	and pr	ovide th	е арр	ropri	ate d	late)											7
	[]	<u>(</u> 1.	EΧ	ISTING FACILITY (S	See inst Comple	ructions te item	for de below.	finition	of "e	xistin:	ıg" fo	zcility	1.			Ę	2.NEW FAC		nplete OR N				
e e	Г	YR.		MO. DAY FOR	EXIST	ING FA	CILIT	IES, PR	OVIE)E TH	IE D	ATE	(yr.,	mo.	., &	èday) F	YR. MO.	P	ROVI	DET	HE D	ATE.	
8		3 0		OPER	RATIO	N BEGA	NOR	THE D	ATE (CONS	STRU	JCTIC) NC	сом	IMI	ENCED		i i i i i i i i i i i i i i i i i i i	ION E	BEGA	NOR	IS	Ì
퍔.	RE	VIS	긡	75 74 77 78 APPLICATION (P	lace an	"X" be	low an	d compl	ete It	tem I	abou	e)					73 74 75 76	77 78					-
]	_	-		CILITY HAS INTER!					1			-,					2. FACILIT	Y HAS A R	CRAI	PERM	IIT		
III	PR	00	ES	SES – CODES AN	D DES	SIGN C	APAC	ITIES									72						
_				CODE — Enter the coo						low *	het h	oet d	950-	iber	000	ch process to be	used at the fo	cility Ton	lines s	FO P.	widod	for	
,	ente	ring	CO	des. If more lines are	needed	l, enter t	he cod	ie <i>(s)</i> in ti	he spa	ace pr	rovid	ied. I	fap	proce	ess	will be used tha							
	desc	ribe	the	process (including its	s design	capacit	y) in t	he space	prov	rided (on th	e for	m (t	'tem	///	I-C).					•		1
				DESIGN CAPACITY		ach cod	e entei	red in co	lumn	ı A en	i te r ti	he cap	paci	ty of	f th	he process.							
	1. /	٩MC	าบด	NT — Enter the amoun F MEASURE — For e	nt.												sure codes hel	ow that dee	cribee	the •	init of		
ľ	· ·	neas	sure	used. Only the units	of mea	sure tha	t are li	isted bel	ow sh	nould	be us	sed.	11										
l					PRO-			ATE UN									PRO-	APPROP					
۱ _			Pi		CESS CODE			FOR PR						E	2 R (OCESS	CESS CODE	MEASUF DESI	GN C				
St	ora	je:	_									Trea	tme	nt:	_								1
	ONT		NEF	R (barrel, drum, etc.)	501 502	GALL	O RNC	R LITE	RS RS		Treetment: TANK TO1 GALLONS PER DAY OR LITERS PER DAY												
w	AST	TE P			503	CUBIC	METE	DS OR ERS				SURFACE IMPOUNDMENT					T02	GALLON!	5 PER	DAY	OR		
		_		MPOUNDMENT	S04			RLITE	R\$			INC	INE	RAT	гоі	R	T03	TONS PER	R HOU TONS	JR OI PER	HOU		i
	ispo (JE)			WELL	D79	GALI	2NE ~	R LITE	Re									GALLONS LITERS P	S PER	HOU			Ì
	ANI				D79 D80	ACRE-	FEET	the volume one acre	ume i	that		OTH the	IER	(Use	e fo	or physical, cher ogical treatment	mical, T04	GALLONS LITERS P	SPER	DAY	OR		
l			٠				of one	foot) OI				proc	:esse	es no	t o	ogical treatment occurring in tank idments or incin	:s,	LII ERS P	- M 10	n T			
				ICATION POSAL	D81 D82	ACRES	SORF	IETER IECTAR ER DAY				atom	s. D)escri	ibe	iaments or incin e the processes it ided; Item III-C.	n						
ŀ				MPOUNDMENT	D83	LITER	SPER					**** 5	€ 400 سیر	€77مو ۔	_ U 61	and the state of t	- <i>•</i>						
<u> </u>	4				UNIT			· · · · · · ·							اهل	NIT OF					UNI.	r OF	
	A	~-		ACUE	MEAS	URE				m	p-				VE.	ASURE		F A A			MEAS	SURE	
_				ASURE	COI			UNITO								CODE	UNIT OF M				CO		
ᆫ	ITE	RS						TONS	ER	HOUR	.	· · · ·					ACRE-FEET HECTARE-	METER					
C	UBI	СМ	ET	DS				METRIC GALLO	NS P	ER H	OUR	₹					ACRES HECTARES					B Q	
G	ALI	-0 N	15 P	R COMPLETING ITE		u	n lin-	LITERS	S PER	OH F	UR.					н							į
oth	er c	an h	old	400 gallons. The faci	ility als	o has an	incine	rator the	at can	<i>ana ,</i> burn נ	∧- <i>∠ D</i> 1 up 1	<i>нио</i> м, to 20	y. A gall	ons p	per	ty nas two stora! r hour.	ge tanks, one t	ank can noi	a 200	gallo	ns and	tne	1
-						T/A C	7		$ abla_{j}$	7	7	7	$\overline{}$	<u> </u>	$\overline{\zeta}$	777	777	77	7	7	$\overline{}$	$\overline{}$	4
C				DUP	- 12	14 15	_\ `	//	\				/	/	/		111	(/ '	/ /	/ /	/ /	
1	T	PR		B. PROCESS			PACI	TY	T			,	1		Ţ	B. PROC	ESS DESIG	N CAPAC	ITY				7
BER	\accelor	ES	s					2. UNI1		FOR		BEF	C	PRC ESS	\$				2. U			OR ICIAI	
LINE	(fr	OD om	list	1. AMC			ľ	OF MEA	``]	USE		INE	(fro	ODE om lii		1.	. AMOUNT		OF N	RE	U	SE	-
Ξź	a	bove			-107			(enter code)	⊥ '	ONL	T	SE	ab	ove)		i			(en	ter de)	OF	ILY	
.,	16	ارًا	18				27	28	15	- 1	32		16	- 1	•	19		27	1 12	-	29	- 3 :	2
X-1	3	0	2	600	' 			G		ot	\perp	5	\Box				 						
X-2	$ _{T}$	ام	2	20								4]		ſ		-						
Λ-4	1	"		20				E		$oxed{oxed}$		6			\perp					\perp		\coprod	
1	_			100 0==			[1			7				_	_					1	
•	S	0	1	182,250)			G	\bot	$oxed{oxed}$			Ш		\perp	· · · · · · · · · · · · · · · · · · ·				$oldsymbol{\perp}$		$\perp \perp$	
	t		2	27,300)		}	G				8						· · · · ·	+			1 T	
	0	י חו		4/,300	,			اقا	4-4	$\sqcup \!\!\! \perp$	1	لـــّــا	1						1 1				_
<u>-</u>	s	0	_	· · · · · · · · · · · · · · · · · · ·								, ,	\Box		_				+	_	-		
3	t^-			······································)			Е				9			1				\prod				
_	t^-	0		50)			Е	-		\bot	_			1								
3	t^-			50)		27	E 28	29		32	9 10	16		18			27			29		12

TTT	DDC	ACCCCC.	(continued)
ш.	rĸ	JUE55E 3	(connnuea)

c. space for additional process codes or for describing other processes (code "T04"). For each process entered here include design capacity.

IV. DESCRIPTION OF HAZARDOUS WASTES

- A. EPA HAZARDOUS WASTE NUMBER Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste/s/ that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous wests: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code/s/ from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- 1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the weste and describing all the processes to be used to treat store, and/or dispose of the weste.
- quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.

 2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- 3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

				C. UNIT														D. PROCESSES			
LINE NO.	W	AS'	TE:	D. NO de)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	S	UR ente	RE ter			1. PROCESS CODES (enter)										2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K	0	5	4	900		P		T	0	3	1	0	8	o	Т	1		1	1	
X-2	D	0	0	2	400		P		Т	0	3	1	D,	8	o	7	7		7	1	į.
X-3	D	0	0	1	100		P		T	0	3	1	D'	8	o	Т	1		<u> </u>	T	
X-4	D	0	0	2						Τ-	T	T		T		1	Т	T	Т-	Т	included with above

Continued from the	front.										
III. PROCESSES		P FO	B D	ESCI	DI BI N	G OT	UE P	*POCES	RES (00	ode '	'T04"). FOR EACH PROCESS ENTERED HERE
INCLUDE DESIG	ON CAPACITY.	R PO	ת ה	ESCI	TI BIN	3 0 1	MER	PROCES	363 100	ue	109 /. FOR EACH PROCESS ENTERED HERE
	N OF HAZARDOUS WAST										
A EPA HAZARDO handle hazardous	US WASTE NUMBER - Enter westes which are not listed in	the fo	our-	-digi Subp	numi art D.	ber fr enter	om 4 the 1	0 CFR, S lour—digit	ubpert numb	D for	or each listed hazardous waste you will handle. If you from 40 CFR, Subpart C that describes the characteris-
	oxic contaminants of those hazard										
basis, For each c											antity of that waste that will be handled on an annual intity of all the non-listed waste(s) that will be handled
C. UNIT OF MEAS codes are:	URE — For each quantity enter	red in	col	umn	8 ente	er the	unit	of measu	re code	e, Ur	nits of measure which must be used and the appropriate
	GLISH UNIT OF MEASURE				COD	E					OF MEASURE CODE
	NS										
	s use any other unit of measure opriate density or specific gravity					nits of	mee	sure must	be cor	1 vert	ted into one of the required units of measure taking into
D. PROCESSES											
	zardous waste: For each listed i								lect the	e coc	defet from the list of process codes contained in Item III
For non-lists		charac	cter	istic (or tox	ic cor	tami	nant ente			mn A, select the code(s) from the list of process codes
_ that character	ristic or toxic contaminant.									•	ose of all the non-listed hazardous wastes that possess
	spaces are provided for entering box of Item IV-D(1); and (3) Er										i first three as described above; (2) Enter "000" in the rand the additional code(s).
2. PROCESS DE	ESCRIPTION: If a code is not lis	sted fo	or a	proc	os the	nt will	be u	red, descri	ibe the	proc	tees in the space provided on the form,
ama then are EDA	Linnandaria Marca Mirroban chall b		_		-	- L					KARBITA - Hazardous waters that can be described by
. A Chilana and al	recording wages for unique when of the EPA Heserclous Waste Number he waste and describing all the pro- cording sent likes entire the other							2	e line	port	plets appeared \$.C. and & by differential the terms demand
1. In column A	of the next line enter the other th above? and make no ether was	BA						en jara gari Salahan	- m	•	
A Player step	for each other SPA Herestless	liere	Nu	- bar					÷ 441		
and the same	Sharing from leather making a	مک امد	اعاط		77 48	and it is to			/pii/	A	The sounds
is perrocise only a	and there will be an astiguated 2 r of that waste. Treatment will be	وم 90	und	e per	-	المحدد واستاد دما (1946)			ether v a lendi	,	is consider and ignitions and mark all to an estimated
A. EPA		C. U	MI	7							D. PROCESSES
MAZARD. MASTENO Henter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	84	I PLE			1,	•	an cons	16		J. TESTE CHEST ST.
		17	de)	+	1.1	1"7		111	77	1	
E 0 5 4	900		P	\perp^T	0 3	里	8 (21 .			A CONTRACTOR OF THE PARTY OF TH
02	400		P	T	0 3	0	80			.1 .	
[-3]D 0 0 1	100		P	T	0 3	D	8 0			1	
:4 D 0 0 2					1 1	'	1		'	1	included with above

C	T	D D	9	9 (0672081			•		¥ K.											
	. इ. व. व्	4.				*				•											
	47		•				F	ł													
								L		ļ	Į	Ļ	Į	ļ	Į	_			r		
	F	0	0	7	* 370	T	I	s	0	1	s	0	1	<u>}</u>	[0	3	_	1	-	
1	F	0	0	8				Ļ		T-	$oldsymbol{\downarrow}$	1	_	4	-				т	1	Included with line l above
	F	0	0	9						_	L		_						_		ii .
	P	0	2	9					•	<u>'</u> _		•	•		•					•	11
	P	0	3	0								T	T		ı	,			,		11
	P	0	9	8				Š	1	T		T	1		7	1			Τ-	7	11
7		1		\exists			3.50	- Jacob	T		T	1	-1	1	1	1			Τ_		11
					* 6600	Т			Т	T-	1	T	Τ.	1	-	_	~		τ-	1	
		0		П	* 6600			# 2	Т	7	13	7	' +	-	<u> </u>	<u> </u>			т -	Υ-	
	D	0	0	4					1	Т-	\dagger	Т	-	1	1			-	τ-		Included with line 8 above
-	D	0	0	5			1.00.42 6 0		—	1	+	1	-	+			-	\vdash	т	1	11
			0	6			7.3		1	7	+	7	•	+	-,		-	-	_	1	11
	D	0	0	7			- 1				+	_		4	···•			\vdash	Τ-		"
	D	0	0	8	· · · · · · · · · · · · · · · · · · ·	100			_		\downarrow	_		_				<u> </u>	_	· T · ·	11
	D	0	0	9		我	THE RESERVE OF THE PARTY OF THE		_	—		_							_	· ·	11
	D	0	1	0		3	36.16									,			•	•	11
F	D	0	1	1				(#) 2	T	-1-		1					,		1	1	11
一 一 一	U	1	Γ					÷	1	T	T	7	1				1		1	1	11
	,,	1							1	1	1	1	—	1			1	T	1	T	. 11
	,	1						,	—	_	\dagger	T	7	1		1	1	t	Т	T	11
	Į.	Г							1	7	\dagger	1	_,	-		T	Т	\dagger	T	1	11
	$\overline{\mathbf{I}}$	2						. K (18)	_	Т	\dagger	1	7			1	1	+	Т	-	
7	F	0	0	1	* 370		Γ.		S ()]		3 (0	2	T	0	7	╀	7		
*	F	0	0	2			4	74 V.	-	_	+	_	_		_	1	т-	\downarrow	1	-	Included with line 21 above. Note: Lines 21 & 22 comprise
i de	F	0	0	3			4			_	+	_			_	т	1	\downarrow	T		about 90% of the annual quantity
			0	4				٠			\downarrow	_				_		1	_		11
	F	0	0	5		龙			,	,		*					_			_	11
2	Ų	0	Jo.		BAND THE VIEW DO SHAPE TO BE SHAPE TO SHAPE THE SHAPE TO SHAPE THE			-	7	- T		7				,	-		T	A.E.	11

	_		_		is page before completing if you BER (enter from page 1)	7	7	Ť					_		FIC	IAI	L USE C	Form Approved OMB No. 158-S80004
w c	Т	Г	9		0 6 7 2 0 8 1 1	/)		v					D U				2 DUP
IV.	DES	CF	RIP	TIC	ON OF HAZARDOUS WAS	TES (con		ued)									13 14 15 13 . 10
	l _H ,	A. I	EP/	D.	B. ESTIMATED ANNUAL	OF	UNI ME	a -										D. PROCESSES
N S	W A	157			QUANTITY OF WASTE	17	URE enter ode)				1. P	RO	(eni	55 C(ter)	DE	5		2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	22 F	n	0	7		a .	T		7 -) 1		• 1	1	T (1		7 7 7 8 9	
2		0			370		++	+	, , ,	-		<u> </u>		+	-		т- т	Included with line l above
3		0						+	- r-	T	 		7	1	7-	╁	1 1	II
4	-	0		9				+		1	-	1	-	ı	Т		Т~Т	11
5	\top	0						+	7	1		Γ	, -	1	1			11
6	T	0						+	Т	-		1	'	,	T		1 1	11
7	P		0					+		ī	-	1			T		-, ,	17
8	D	\vdash	0		* 6600		Т	\dagger	Т	T-	s	0	1	s () 2			
9	D	0	0	4				\uparrow		1	 	1		1			-11	Included with line 8 above
10	D	0	0	5					Τ	1		ī		-	Τ		7 .	11
11	D	0	0	6					7	-, -		1	1	1	Т		-1-1	11
	D	0	0	7				1	Т	ī		1	T	1	- 1		1 1	11
13	D	0	0	8						Т		1	T -		-, -		- - - - - - - - - - 	11
14	D	0	0	9					Т		 -	T	Т		т-		T-T	11
15	D	0	1	0				1		1		1	1		1		7 1	11
16	D	0	1	1					T	T	1	T	T	1	T	1	-1	11
17	บ	1	3	3					Т	T		Т	1		T	†		11
18	U	1	3	4					Т	- 1		T	Τ_		Т		7-7-	11
19	บ	1	8	8				1	-T	- 1		T			T	\dagger	1 1	11
20	U	2	o	1					7	· T -		7 -	Τ_	1	1		1-1	11
21	F	o	o	1	* 370		Т		S	0 1	s		2	T) 3			
22	F	0	0	2					T	T -		1	T		_		7 1	Included with line 21 above
23	F	0	o	3					T	T		1			T		T T	"1
24	F	0	o	4					7	T		1			1		Т-1	u
25	F	0	0	5					Т	1	T	Т	T		T		- 	11

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

1	_		_		समिति /			片				300	1		A SELECTION OF A SECOND				
E	CRIPTION OF HAZARDOUS WASTES (cont.							tinued)											
90		137	EPA AR EN	Ю	QUANTITY OF WASTE	6	retr ode)	-	- 										
	4						4	1	1	1	1,32	Eq.()		क्षा जट छ					
	ľ	0	2	1				1	1 1	↓	-	<u> </u>			Included with line 21 page 3A. Note: Lines 21 & 22 comprise				
		_	1							'	•	'			about 90% of the annual quantity				
	Ų,	U	3	-				-	1 1	+	1	1 -	•						
	U	0	4	4				3							11				
	II	0	5	2					1 1		1			1	11				
3			5			à	3		1 1		1		•	- 1	II .				
.6			5						1 1	1	1	1			T1				
7			ر 5					1	T T	+	T	7	-	1.1	11				
8			ر 7					1	11	+ 1		T	-		11				
9							.,	\dagger	т т	1	1	-			11				
10			8					1	T 	+ 7		 	T	- , , , -	11				
11	U	1		8			\top	\dagger	1 1	+ -		-	1	1 1	11				
- 1 >		1	_	2				+	1.1	+		+-	1		II .				
13	ل (Н	+	\dagger	1 1	+,				1 1	11				
14		1					+	1	1 T	+,		+-	1	11	11				
15	U					H	+	1	1 7	+¬	-	-	1	1 1	11				
16	Ü							+	т т	+	1	+	T	1 1	11				
17							+	+	1 	+¬	1	+-	1	F - T	11				
	Ţ	1 1							1 1	┿	1	+	-						
	U]	6	1		2.7	, and		7-7	╆		+ -	T	1 1					
1			6	5		4.6	The state of the s		ТТ	+,	- 1	++	Т	1 1	11				
21		2	1	0			- 5	51	т-г	+-		+	T-	1	11				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	U	2	1	1					<u> </u>	+	1	++	1		n n				
22	U	2	2	0				+	T 1	+	Г	+	1		D .				
1	U	2	2	3		100				+	г	1	1	 	11				
ia		<u>2</u>	2	6					11		· ·		1	7 1	11				
	U	2	2	8				1	1 1	\downarrow	, , , , , , , , , , , , , , , , , , ,	<u> </u>	-	 	· · · · · · · · · · · · · · · · · · ·				
26	Ų		3			1		تل	7 - 1					M - 10	, ,				

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

	EPA I.D. NUMBER (enter from page 1)				/	1	Z	FOR OFFICIAL USE ONLY											
w c					0 6 7 2 0 8 1 1	7/	7	Δ	w .				<u>D Ų P</u>	· · ·		7/A C D U P			
<u> </u>					N OF HAZARDOUS WAST			-	ued)		•								
LINE NO.	HA WA (en	ST	IR En	D. 10	B. ESTIMATED ANNUAL QUANTITY OF WASTE	01	UNI ME URI ente	A- E 7			1. PR	OCE (en	iss cot	DES		D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))			
1	23 U	_		26 1	•		36		27 -	29	27 .	29	27 -	29	27 - 29	Included with line 21 page 3A			
2	U			1		1		-	Τ-	1	 	1	1 7-1		1	II			
3	U	0	4	4		<u> </u>				1		1	1 1		1 1	11			
4	U	0	5	2						T -		- 	1-1-1		T	11			
5	U	0	5	4						1		1			7	11			
6	U	0	5	5						1	1	T			1 - 1	11			
7	υ	0	5	6						, 		'				tt.			
8	U	0	7	7		_		_	'	· 	'	1	ļ ' '		· ·	11			
9	U	0	8	0		1				· -	<u>'</u>	•	·		, , ———————————————————————————————————	"			
10	U	1	0	8						•		•	ļ.,		· · · · ·	n			
11 	U	1	1	2		-				· —		·				11			
12	U	1	2	1		-				· 	-		ļ	г -					
13	U	1	3	8		-					-		1	1	T-1-	11			
14	U	1	4	0		-				_	-	· T	1	_	7-1	11			
15	U	1	4	4		-	-		 	<u> </u>			ļ			11			
16	U	1	5	4		-			 		ļ		1	1		11			
17	บ	1	5	9		-	-	_	-		 		-	·		tt .			
18	U	1	6	1		-	-				-	т-	+ +	1	7-7-	11			
19	U	7				-			-	1		· ·		,	- 1 - 1 -	11			
20	U	2	1	0		+	$\ \cdot\ $		-		-		1	г		"			
21	U	2	1	1		+	$\left\{ -\right\}$		-	7	-	Т-	1	T	1 1	11			
22	ט	2	2	0		-	$\left\{ \cdot \right\}$		-	1	-	-	-		-1	11			
23	U	2	2	3		+	$\left\{ \cdot \right\}$	-	-	-	-	_,_	 	1		11			
1	U	2	2	6		-	$\left \cdot \right $		-	1	-	-		r -	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	11			
25 26	U	٦				+	$\left\{ \cdot \right\}$			_	1		 	_		"			
EPA I	23	2	3	26		5	36		27	- 29	27	~ 29	27 -	29	27 - 29	" CONTINUE ON REVERSE			

Continued from the front,			
IV. DESCRIPTION OF HAZARDOUS WASTES (co		M D(I) ON BACE 3	
E. USE THIS SPACE TO LIST ADDITIONAL PRO	CESS CODES FROM TTE	M D(I) ON PAGE 3.	
			-
,			
EPA 1.D. NO. (enter from page 1)			
FCTD990672081 6			
V. FACILITY DRAWING			
All existing facilities must include in the space provided on	page 5 a scale drawing of the	facility (see instructions for more	detail).
VI. PHOTOGRAPHS			
All existing facilities must include photographs (aer	rial or ground—level) that c	learly delineate all existing st	ructures; existing storage,
treatment and disposal areas; and sites of future sto	orage, treatment or disposa	areas (see instructions for m	ore detail).
VII. FACILITY GEOGRAPHIC LOCATION			
LATITUDE (degrees, minutes, & second	·s)	LONGITUDE (degrees	, minutes, & seconds)
4 1 4 5 0 0		7 2 3	ВОП
VIII. FACILITY OWNER		1/2 - /4	3
X A. If the facility owner is also the facility operator as	listed in Section VIII on Form	1, "General Information", place	an "X" in the box to the left and
skip to Section IX below.			
B. If the facility owner is not the facility operator as	fisted in Section VIII on Form	1, complete the following items	:
1 NAME OF FACE	ILITY'S LEGAL OWNER		2. PHONE NO. (area code & no.)
E 19 16			55 56 - 58 59 - 61 62 - 6
3. STREET OR P.O. BOX		TY OR TOWN	5. ST. 6. ZIP CODE
F	Ğ		
15 16	45 15 16	- 40	41 42 47 - 51
IX. OWNER CERTIFICATION	and and an formitie		tend in this and all attached
I certify under penalty of law that I have personally documents, and that based on my inquiry of those	/ examined and am ramilial individuals immediately re	sponsible for obtaining the in	formation, I believe that the
submitted information is true, accurate, and comple	ete. I am aware that there a	are significant penalties for su	bmitting false information,
including the possibility of fine and imprisonment.			
A. NAME (print or type)	B. SIGNATURE		C. DATE SIGNED
J. P. Balaguer	1 0/3 (4/20/83
Executive Vice President	I Notala()		
	y avaminad and are fam:!!-	r with the information submit	tted in this and all attached
I certify under penalty of law that I have personally documents, and that based on my inquiry of those			
submitted information is true, accurate, and comple	ete. I am aware that there a	are significant penalties for su	bmitting false information,
including the possibility of fine and imprisonment.			

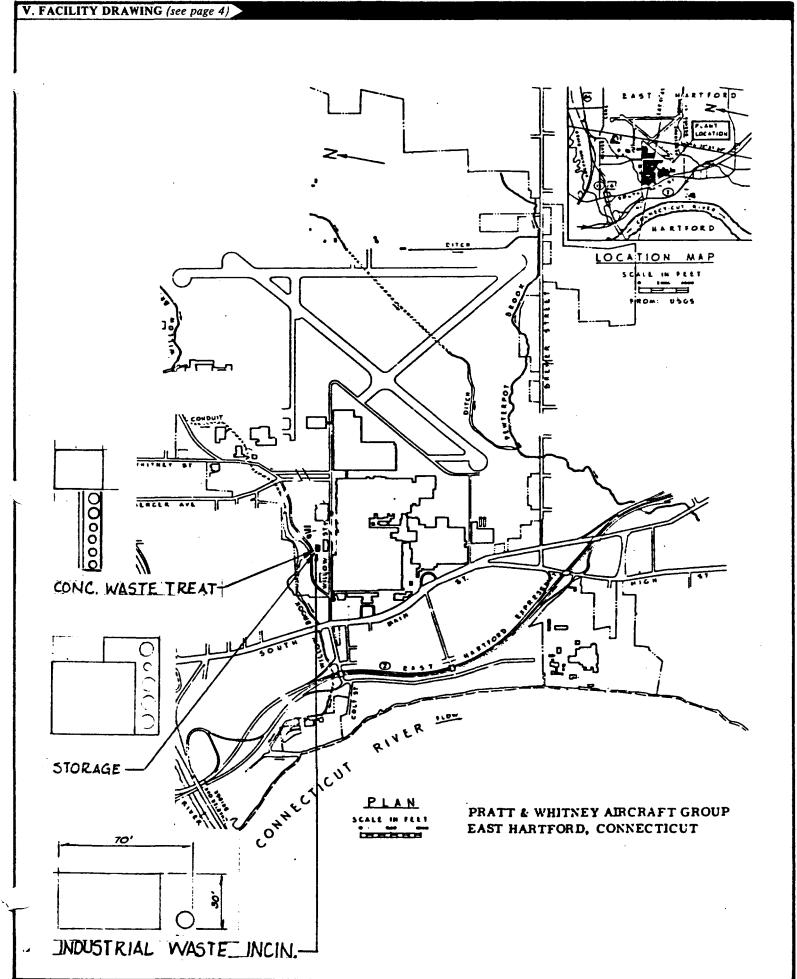
CONTINUE ON PAGE 5

C. DATE SIGNED

A. NAME (print or type)

B. SIGNATURE

Continued from the front.		
E. USE THIS SPACE TO LIST ADDITIONAL PROC		
2. USE THIS SPACE TO LIST ADDITIONAL PROC	CESS CODES FROM HEM D(I) ON FAGI	- 3 .
	•	
·		
CTD990672081		
The state of the s		
FACILITY BRAWING	ness 5 y seein demains of the facility fees instruct	lans for more detail!
AL PROTOGRAPHS	page 5 a scale drawing of the facility (see wadde)	COLE TOP THOSE COLORY).
ting facilities must include photographs (seri	al or ground—lavel) that clearly delineate a	l existing structures; existing storage.
rt and disposal areas; and sites of future stor		
ACILITY GEOGRAPHIC LOCATION		
LATITUDE (degrees, minutes, & seconds,	LONGIT	UDE (degrees, minutes, & seconde)
414500		7 2 3 8 0 1
VIII. PACILITY OWNER		7 · 14 78 177 · 19
$\overline{\mathbf{X}}$ A. If the facility owner is also the facility operator as i	isted in Section VIII on Form 1 "General Inform	petion" place an "X" in the box to the left and
skip to Section IX below,		
B. If this lightlifty anymer is date the facility operator as i	isted in Section VIII on Form 1, complete the fo	Alguing Items:
		2. PHONE NO. forms sode & No.)
A A A A A A A A A A A A A A A A A A A	STY'S LEGAL OWNER	
1 Carlo Action . A sec affection for a second control and a second contr		
		A THE STATE OF THE
46	- 通	
San Agricultura (1997) and a single of the control	Production in the second secon	GRANTE TO THE STREET OF STREET
The state of the s	and the second s	er manysta and a unit space of the control of the c
The line has been been been been been been been bee	contracted the place of agree	e compression and an application of the second
South and the trade of the said of the said of the said	and the second control of the second control	at the state of many the state of the state
A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
John P. Balaguer	1/3/0	November 30, 1983
Executive Vice President	Malagur	
THE MARKET THE MARKET		
and problem to be the face principle	examinated and and bandles with the latonic	stion extended in this and all attached
the information is true, according the comple	ndhildbak immediatily hispansible for öbb të. I ato aware that there are significant par	uning the enternation, replicate teat one
minimizer the possibility of the and imprisonment.		
A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
	1	(



APPENDIX II
UNITED TECHNOLOGIES 1982 ANNUAL REPORT



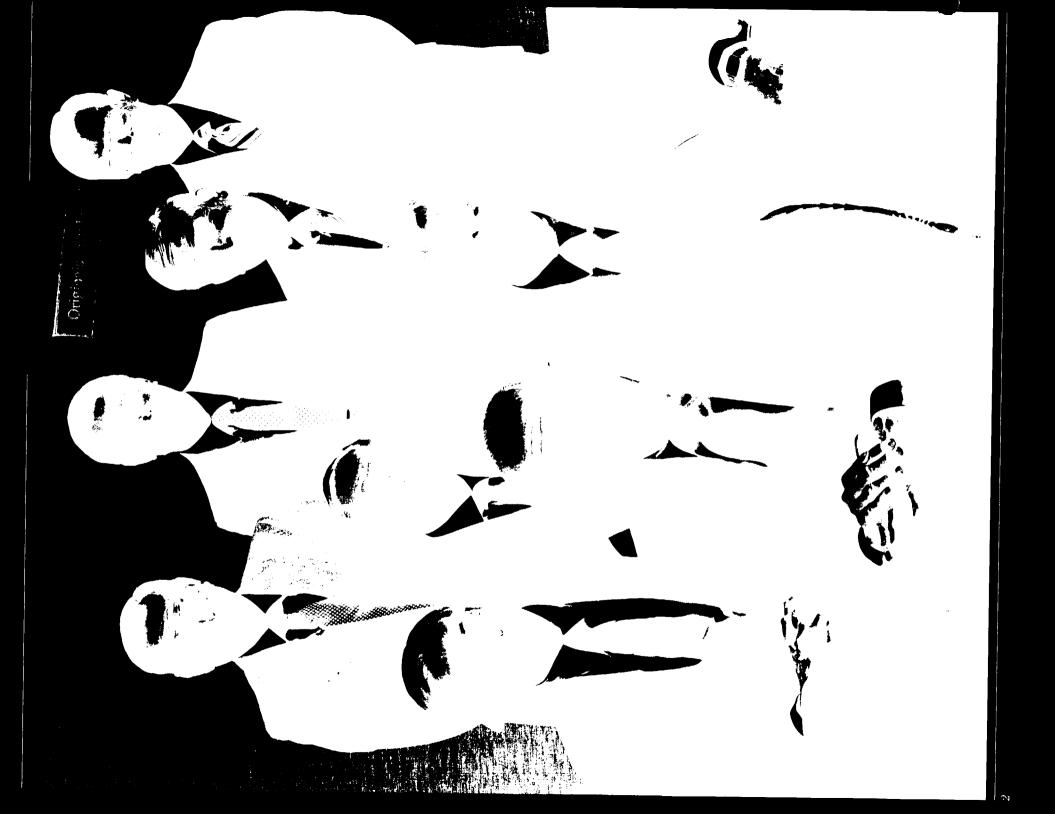
nited Technologies is a diversified high technology company with worldwide headquarters in Hartford, Connecticut. The corporation employs approximately 184,000 people, operates some 300 plants, and maintains sales and service offices around the world. United Technologies ranks as the 45th largest industrial concern in the world, the seventh largest manufacturer in the United States and the second largest U.S. defense contractor. Our three basic industries are aerospace, building systems and electronics. The corporation's most familiar lines of products are Pratt & Whitney jet engines, Carrier air conditioners, Otis elevators and escalators, Sikorsky helicopters and Mostek semiconductors. Other products include Hamilton Standard jet engine controls, environmental controls and propellers for commercial and military aircraft; Norden Systems' radar and displays, minicomputers, and integrated command and fire control systems; Inmont inks used in printing, publishing and packaging, and paints for automobiles; and American Bosch diesel fuel injection systems.

Highlights

		1982	1981
Our Performance in Brief	Sales Income before extraordinary item and cumulative effect of	\$13.58 billion	\$13.67 billion
	change in accounting principle Net income Earnings per share: Income before extraordinary item and cumulative effect of change in accounting principle: Primary	\$ 427 million \$ 534 million \$ 6.73	\$ 458 million \$ 458 million \$ 7.71 \$ 7.05
	Fully diluted	\$ 6.41	\$ 7.05
	Net income: Primary Fully diluted	\$ 8.74 \$ 8.01	\$ 7.71 \$ 7.05
	Dividends per common share Year-end business backlog Research and development Capital expenditures	\$ 2.40 \$11.70 billion \$ 834 million \$ 528 million	\$ 2.40 \$11.65 billion \$ 736 millior \$ 591 millior
		Decemb	oer 31,
	In millions	1982	1981
Significant Jalance Sheet Items	Assets Current assets Fixed assets — net Other	\$4,604 2,386 1,003	\$4,489 2,203 863
	Liabilities Current liabilities Long-term debt Other Shareowners' equity	\$3,050 927 534 \$3,482	\$2,915 832 595 \$3,213

Contents

Page 1	Highlights
3	Report from the Chairman
5	Review of 1982
11	Financial Review
12	Five-Year Summary
14	Management's Discussion and
	Analysis of Results of Operations
	and Financial Position
17	Comparative Stock Data
18	Selected Quarterly Financial Data
19	Management's Responsibility
	for Financial Statements
19	Report of Independent Accountants
20	Consolidated Financial Statements
25	Notes to Financial Statements
36	Consolidated Summary of Business
	Segment Financial Data
39	Board of Directors and Committees
40	Management



ear Shareowner,

United Technologies has held its own in the face of the roughest economy in decades. Our sales were down only slightly from 1981. A diversity of businesses and strong market positions softened the impact on earnings of lower volume in certain divisions and of substantially higher research and development investments. Net income from operations for 1982 declined 7% from 1981.

Total net income in 1982, however, rose 17% because of two nonrecurring items. These were the cumulative effect of an accounting change for investment tax credits announced in the first quarter, and a tax-free extraordinary gain resulting from an exchange of common stock and cash for the corporation's debentures in the second quarter.

decade has significantly broadened UTC's business base. We now are a major force in three industries: aerospace, building systems and electronics. With economic recovery, United Technologies is in an excellent position to capitalize on opportunities in these markets in the 1980s.

Key members of the corporation's management team

(Foreground) Harry J. Gray, chairman, president and chief executive officer. Second row (from left): Robert J. Carlson, executive vice president — power; Hubert Faure, executive ce president — building systems; Peter L. Scott, executive vice president — electronics. Third row (from left): Edward W. Large, executive vice president —

legal and corporate affairs; Robert F. Daniell, corporate vice president and president and chief executive officer, Sikorsky Aircraft; Stillman B. Brown, executive vice president finance and administration; Edward M. Irving, corporate vice president and president and chief executive officer, Inmont.

Ranked #1 in major businesses

Our markets are big and growing, and we hold the number one position in most of our major businesses. Pratt & Whitney, for example, captured over 60% of all new orders for commercial jet engines in 1982.

While sales of commercial helicopters were weak, the military helicopter market saw significant growth during 1982. Sikorsky exceeded \$1 billion in sales for the first time, establishing it as the industry leader. Both Otis and Carrier strengthened their number one market shares in elevators and air conditioning worldwide.

In electronics, prospects are encouraging. Continued rapid growth is expected for military electronic systems, integrated circuits, avionics and electronic controls for a broad range of aerospace and industrial applications.

UTC's longstanding commitment to research and development continues unabated. Company-funded R&D investments in 1982 totaled \$834 million, up 13% from 1981. Only five other U.S. corporations make such substantial investments in their future.

Applying state-of-the-art technology extends our competitive lead in price, performance and early market entry. It also allows UTC to enter new businesses. During the past year, we booked major construction projects in which our Building Systems subsidiary will integrate building hardware and electronic software. Energy management and telecommunications are offered as part of our total building systems package.

International expansion continues

International expansion holds excellent potential for all of United Technologies. Today, nearly 40% of our sales are to customers outside of the United States and about 35% of our people are located outside of the United States. In the years ahead, international operations are expected to grow at an even faster rate. In 1982 we asked former U.S. Secretary of State Alexander M. Haig, Jr. to chair an International Advisory Committee designed to help us achieve international growth. A former president of UTC, Mr. Haig is uniquely qualified to help develop in-depth, forward-looking assessments of social, political and economic trends in all areas of the world. which, in turn, can lead to new business opportunities.

Increasingly, expansion abroad will involve joint ventures and licensing agreements. Those relationships will allow us to share development costs and technology as well as gain access to established national marketing networks. In 1982 United Technologies concluded a final agreement with AEG-Telefunken of West Germany for participation in a joint venture electronics company with a \$150 million sales base. This venture will form another company to develop and produce advanced semicustom devices. Thus, we now have a solid foothold in Europe's highly competitive market for semiconductors.

We expect to make selected acquisitions supplementing our existing businesses and increasing our divisions' presence outside the U.S. Last year, Essex acquired substantial revenues in Europe and a worldwide network of sales agents by purchasing Isola Group of Switzerland. Essex now ranks as the world's sixth largest independent producer of wire and cable.

We continued to divest assets that did not fit our longer-term strategic goals in order to focus our resources on the growth of UTC's core businesses. In 1982, for example, we sold Carrier's Jenn-Air subsidiary, a manufacturer of kitchen equipment, to the Maytag Company. Programs to improve profitability will be instrumental in our achieving our growth objectives in the years ahead. Our goal is to become the lowest-cost producer in each of our businesses. To increase efficiency and control costs, we are investing heavily in new equipment, automated manufacturing and new processes. Capital expenditures in 1982 totaled \$528 million. Over the next five years, our intention is to reduce production costs by more than 4% a year. Our efforts go beyond manufacturing to encompass all areas of the corporation, and are aimed at increasing profit margins on sales and raising return on shareowners' equity.

Long-term outlook is positive

The year 1983 presents mixed prospects. We expect that our military business will increase and we anticipate modest improvements in several of our industrial areas.

Years of careful planning and strategic realignment have resulted in a strong, balanced, well-organized global corporation. Today, United Technologies is the second largest defense contractor in the United States, the seventh largest U.S. manufacturer and the 45th largest industrial enterprise in the world.

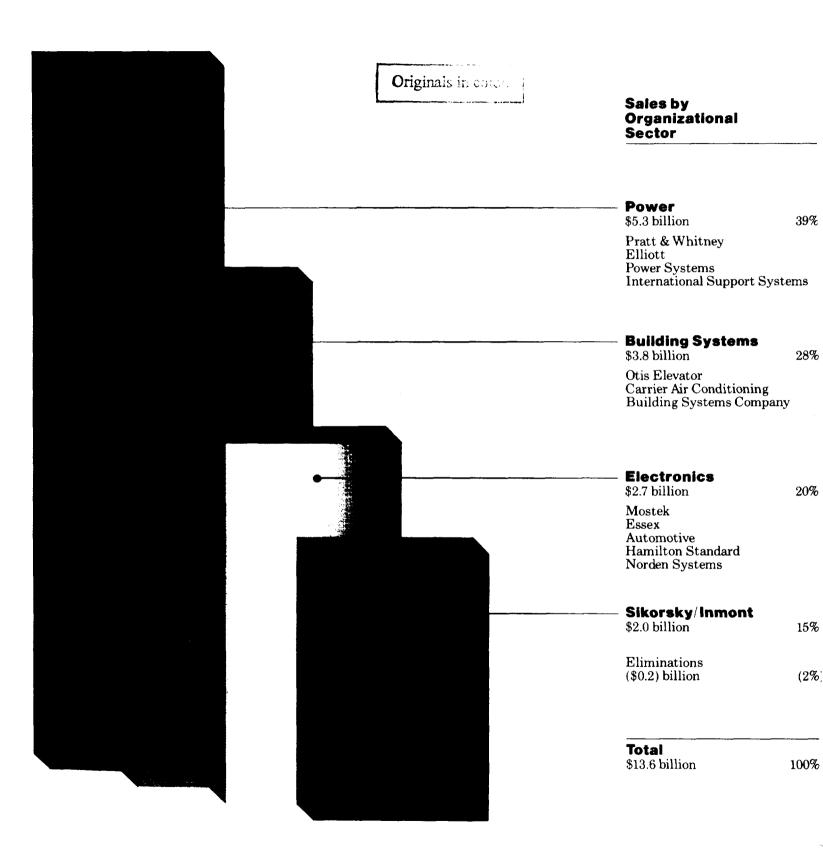
We're in the right markets with the right products at the right time, and we have a strong management team leading the way. United Technologies' long-term outlook is indeed positive.

Assorb Janon

Harry J. Gray Chairman, President and Chief Executive Officer

January 31, 1983

R



nited Technologies' sales declined less than 1% in 1982 to \$13.6 billion. Despite gains in market share, most of the corporation's commercial businesses declined as a result of the worldwide recession. Government-related revenues advanced 18% to \$4.5 billion.

For 1982, net income was \$534 million. This included the cumulative effect of an earlier announced accounting change for investment tax credits of \$66,621,000 in the first quarter and a \$40,226,000 tax-free extraordinary gain resulting from an exchange on June 15 of 1,919,311 shares of common stock and cash for \$165 million principal amount of the corporation's debentures. Excluding those nonrecurring items, net income from operations for 1982 was \$427 million, compared with \$458 million for 1981, bolstered by strict cost controls, productivity improvements and higher prices.

Primary earnings per share for 1982 were \$8.74, based on the 53,104,845 average number of common shares outstanding for the year ended December 31, 1982, including \$1.25 from the cumulative effect of the accounting change and 76 cents from the extraordinary gain. For 1981, primary earnings per share were \$7.71, based on the 49,402,486 average number of common shares then outstanding. The corporation sold five million additional common shares in March 1981.

Fully diluted earnings per share were \$8.01, based on the 66,616,320 average number of fully diluted shares during 1982, including \$1.00

resulting from the cumulative effect of the accounting change and 60 cents from the extraordinary gain. This compared to \$7.05 a share, based on 64,958,277 fully diluted shares during 1981.

Power Sector

Military sales rise, commercial dip; R&D for new engines increases

Sales of the Power Sector were \$5.3 billion in 1982, compared with \$5.6 billion in 1981. A gain in military shipments was not sufficient to offset lower deliveries for large and small commercial engines and spare parts. Major improvements in manufacturing productivity and overhead reductions in sales and other staff areas were accomplished during the year. However, significant increases in R&D investment in advanced new engine programs, coupled with an unfavorable commercial products mix, caused the sector's pretax income to decline.

P&W broadens military product line Sales of military jet engines rose to \$1.8 billion in 1982. Pratt & Whitney maintained a high level of production for the F100 engine for the Air Force's F-15 and F-16 front-line fighters, as well as the TF30 for the Navy's F-14 and engines for other military aircraft.

Work progressed on the PW1128, a higher-thrust derivative of the F100 suitable for advanced versions of current fighters. Development moved forward on the PW1120, a 20,000-pound-thrust derivative of the F100, designed for global markets.

Pratt & Whitney's commercial 2037 engine has been selected to power the C-17 military transport, a program that may go into production at the end of this decade.

To broaden the corporation's government product line, design work began on the PW3005 turboshaft engine in conjunction with Pratt & Whitney Canada. This fuel-efficient engine is suitable for both new and retrofit programs for both military and civil helicopters and turboprop aircraft.

New commercial engine launched

To further increase its leadership in the large commercial engine market, Pratt & Whitney launched a major new jet engine family, the PW4000, late in the year. The new engine is designed to save airlines millions of dollars a year in fuel and maintenance costs. It is scheduled for Federal Aviation Administration certification in July 1986. Demand for engines in the 48,000- to 60,000-pound-thrust class is projected to double over the next 10 years, representing nearly two-thirds of the total market.

The latest version of the JT9D, the Dash 7R4, captured about 61% of the engine orders for widebody aircraft such as Boeing's 747 and 767 and the Airbus A310. First deliveries of the 7R4 began in June, and it has performed flawlessly in flight.

Orders for the smaller, advanced JT8D engine accelerated sharply in the fall as several airlines announced commitments to lease or purchase the JT8D-powered McDonnell Douglas Super 80 and Boeing 737.

PW2037 moves forward

In the medium-thrust category, development of the advanced technology PW2037 continued to meet performance and cost objectives. The fuel-efficient 2037 is the powerplant for the new Boeing 757. Industry discussions continued on the proposed 150-passenger aircraft. Pratt & Whitney is negotiating with a European/ Japanese consortium on a possible joint engine program for the proposed 150-passenger aircraft.

As a result of a sustained slump in airline industry business, the corporation's sales of commercial engines and spare parts declined 20% to \$1.6 billion in 1982.

P&W Canada improves market share

Pratt & Whitney Canada improved its market share in 1982, although general aviation industry problems caused a significant decline in sales and profits. Development of the advanced PW100 family of turboprops was on schedule. The PW100 has won the majority of orders for new 30- to 50-passenger commuter aircraft for deliveries beginning in 1984. A higher-thrust version of the PW100 has been selected to power the first entry in the emerging 50- to 70-passenger category. These orders extended the company's number one position in the turboprop market for commuter aircraft.

Building Systems Sector

Sector reports good sales and profit growth, despite industry weakness

Sales of the Building Systems Sector declined 2% in 1982 to \$3.8 billion. Unfavorable foreign exchange rates and a worldwide decline in air-conditioning industry sales more than offset an increase in elevator revenues. Pretax profit margins expanded because of long-term strategies and shorter-term cost reduction efforts. Pretax earnings advanced.

Otis performance excellent

Revenues at Otis rose in 1982 as a result of the boom in domestic office building construction, market share improvement, and a 4% increase in the number of elevators under service contracts. In addition, profit margins increased.

With its cost reduction drive on target, Otis intensified marketing programs. Following the success of its electronically controlled elevators for high-rise buildings, Otis is introducing ompetitive new products in the medium- and low-rise categories, expanding its sales force, and stepping up emphasis on quality of service and the modernization and retrofit business.

Carrier extends market share

Carrier increased market share in residential and commercial unitary air-conditioning, heating, and ventilating systems. Its international operations are being strengthened, along with further development of its service capability. However, a sharp volume decline in the U.S. market, as well as softening demand abroad, resulted in reduced sales and profits in 1982.

Building Systems marks milestones

Building Systems Company firmly established its presence in the emerging new business for integrated electronic systems and tenant rervices, achieving milestones on schedule and within budget while operating at a loss because of initial startup costs. Several major construction projects were booked during the year, reflecting enthusiastic acceptance of the company's systems and services.

Disney's Epcot Center in Florida, a showcase for the corporation's energy management system, opened in 1982; and Lexar installed its first commercial private branch telephone exchange.

Acquisition enlarges service capability Building Systems Company acquired General Dynamics Communications Company, now called United Technologies Communications Company. UTCC has 50 sales and service offices across the country and the largest non-Bell installed base of PBX telephone lines in the United States.

Also acquired was General Dynamics' Stromberg-Carlson Corporation, which included both a public and private switch business. The public switch business was later sold to The Plessey Company plc of Great Britain.

Electronics Sector

Military electronics continue strong; Mostek moves toward profitability

Sales of the Electronics Sector were \$2.7 billion. The U.S. economic recession hampered all of its operations, except defense systems. Significant progress at Mostek and Norden and a good performance at Hamilton Standard could not offset declines in the automotive and wire and cable operations. Pretax profits of the sector declined.

Essex acquires Isola

Essex gained market share and remained profitable in 1982. A unit volume decline and lower copper prices in the wire and cable industry adversely affected Essex's financial performance in the U.S.

The purchase of Isola, a Swiss-based wire and cable business, gives Essex an excellent position in Europe, with sales agents in many countries worldwide where demand for these products is growing faster than in the more mature nations.

Auto production declines

The Automotive Group was adversely affected by the drop in U.S. automobile production for the fourth year in a row. Diesel Products' results reflected the sharp decline in heavy-duty truck demand and planned higher development expense for its electronic-controlled diesel fuel injection systems. Instrument sales for the scientific, industrial and medical markets also were down. Sales of automotive products and components in the U.S. and in Europe were bolstered by market share gains.

Hamilton and Norden win contracts

At Hamilton Standard, sales in 1982 rose as a result of the introduction of new electronic products and systems, despite the poor commercial aerospace environment. The company enjoyed major "wins" in avionics, as well as in controls and propellers for the new generation of commuter aircraft.

Norden continued its strong growth in military electronic systems. Development programs won in recent years are now entering the production stage. Gains were posted in all product lines, especially in fire command and control. In addition, Norden received several new development contract awards.

Significant progress at Mostek

Mostek significantly lowered its operating loss in 1982, despite continued lackluster demand in the semiconductor industry. Major cost reductions in assembly, testing and overhead allowed the division to move toward profitability. Production of the new 64K Random Access Memory rose quickly, and the product sold out for 1982. Mostek broadened its product line by becoming a second-source manufacturer of the Motorola 68000 microprocessor, introducing innovative peripheral controller chips and offering semicustom circuit designs.

UTMC fulfilling charter

The United Technologies Microelectronics Center made progress fulfilling its charter of increasing the electronics content in products corporatewide. During the year, it moved into its new facility where it intensified efforts to train engineers from divisions in computer aided design systems. UTMC advanced gate array technology, continued to enhance design systems and delivered products to a number of divisions.

Sikorsky

Sikorsky sales cross \$1 billion mark, establishing it as industry leader worldwide

With revenues exceeding \$1 billion, Sikorsky became the world helicopter industry leader in 1982. Profit margins continued to improve. Black Hawks were produced at a high rate under a multiyear contract from the Army. The Seahawk went into production for the Navy, with deliveries scheduled to begin in 1983. Sikorsky won an Air Force contract for the Night Hawk search and rescue helicopter. Production also remained high on the Navy's Super Stallion transport and development of a minesweeper version continued.

Deliveries of Sikorsky's commercial S-76 declined. However, the division introduced the improved and refined S-76 Mark II helicopter plus an armed/utility version of the S-76 which offers some foreign governments an alternative to the larger Black Hawk.

Sikorsky entered 1983 with a bright future and a solid foundation of major production and development programs. The division is continuing its research and development activities to ensure that it has the technological lead to design the best of the next generation of helicopters for the 1990s and beyond.

Inmont

Inmont achieves margin increases, expands market share

In spite of declines in U.S. auto production and the demand for inks, Inmont's earnings increased in 1982, while sales remained nearly flat. The company strengthened its technological position and increased its share of the original equipment manufacturer paint market. New product introductions and strict expense controls led to higher market share and profit margins in several parts of the automotive business in the U.S. and abroad. Profitability in printing inks was also improved through aggressive cost reductions.

R

Five-Year Summary

In Thousands of Dollars (except per share amounts)		1982		1981		1980		1979		1978
For the Year:										
Sales	\$1	3,577,129	\$1	3,667,758	\$1	12,323,994	\$9	,053,358	\$6	,265,318
Percent to United States Government	•	33%		28%		22%	•	23%		27%
Cost of goods and services sold	\$	9,956,151	\$1	0,081,262		9,038,161	\$€	5,542,480		,480,879
Research and development	\$	834,476	\$	735,825	\$	660,296	\$	545,471		438,879
Interest expense	\$	250,886	\$	244,839	\$		\$	138,589	\$	45,663
Income taxes	\$	318,244	\$	402,691	\$	373,844	\$	284,050	\$	244,620
Income before extraordinary item and										
cumulative effect of change in accounting										
principle	\$	426,874	\$	457,686	\$		\$	325,608	\$	234,144
Net income	\$	533,721	\$	457,686	\$	393,383	\$	325,608	\$	234,144
Percent of sales		3.9%		3.3%		3.2%		3.6%		3.7%
Preferred Stock dividend requirement	\$	69,570	\$	76,835	\$		\$,	\$	23,219
Earnings applicable to common stock	\$	464,151	\$	380,851	\$	312,144	\$	270,046	\$	210,925
Earnings per share:										
Income before extraordinary item and										
cumulative effect of change in										
accounting principle:										
Primary	\$	6.73	\$	7.71	\$	7.28	\$	6.49	\$	5.45
Fully diluted	\$	6.41	\$	7.05	\$	6.51	\$	5.71	\$	4.76
Net Income:										
Primary	\$	8.74	\$	7.71	\$	7.28	\$	6.49	\$	5.45
Fully diluted	\$	8.01	\$	7.05	\$	6.51	\$	5.71	\$	4.76
Cash dividends on common stock	\$	127,265	\$	118,136	\$	94,447	\$	91,699	\$	79,82
Per share	\$	2.40	\$	2.40	\$	2.20	\$	2.20	\$	2.00
Capital expenditures	\$	528,353	\$	591,192	\$		\$	331,175	\$	216,835
Depreciation	\$	325,811	\$	277,630	\$		\$	155,989	\$	110,610
Return on assets, before taxes		9.9%		11.9%		11.8%		12.7%		15.9%
Salaries and wages	\$	3,928,648	\$	3,859,152	\$	3,635,329	\$2	2,894,122	\$ 2	,145,746
Average number of shares of										
Common Stock outstanding:										
Primary		53,104,845		9,402,486		12,855,312		1,625,259		3,721,528
Fully converted	6	36,616,320	6	64,958,277	(50,138,481	55	5,510,920	49	,162,175

In Thousands of Dollars (except per share amounts)	1982	1981	1980	1979	1978
At Year End:					
Net working capital	\$ 1,554,104	\$ 1,573,982	\$ 1,359,139	\$ 1,480,024	\$1,124,630
Current asset ratio	1.5 to 1	1.5 to 1	1.4 to 1	1.6 to 1	1.8 to 1
Total assets	\$ 7,993,376	\$ 7,555,103	\$ 7,336,016	\$ 6,468,806	\$4,074,235
Short-term borrowings	\$ 449,391	\$ 392,762	\$ 663,548	\$ 436,473	\$ 44,699
Long-term debt	\$ 982,333	\$ 906,776	\$ 892,843	\$ 944,875	\$ 773,690
Debt to total capitalization	29%	29%	36%	36%	32%
Net worth	\$ 3,481,790	\$ 3,212,511	\$ 2,734,853	\$ 2,487,156	\$1,772,788
Common shareowners' equity	\$ 2,775,784	\$ 2,445,910	\$ 1,864,827	\$ 1,599,860	\$1,411,767
Equity per common share	\$ 51.12	\$ 47.14	\$ 42.71	\$ 37.99	\$ 34.39
Unfilled orders	\$11,700,000	\$11,650,000	\$11,400,000	\$10,500,000	\$8,675,000
Number of employees:					
United States	120,200	124,700	136,200	136,500	105,900
International					
Europe	32,500	30,000	28,000	28,500	23,100
Other	31,200	35,000	36,000	32,700	23,200
Total	183,900	189,700	200,200	197,700	152,200
Number of shareowners	77,400	81,500	86,600	88,200	65,600

Notes: Effective January 1, 1982, the Corporation changed its method of accounting for investment tax credits from the deferral method to the flow-through method. Net income for 1982 includes \$66.6 million (\$1.25 primary earnings per share and \$1.00 fully diluted earnings per share) cumulative effect of this change in accounting principle. Pro forma amounts for the years 1978 through 1981, assuming retroactive application of the accounting change, are: net income for 1981 - \$473.6 million, 1980 - \$408.3 million, 1979 - \$331.4 million and 1978 - \$237.9 million; primary earnings per share for 1981 - \$8.03, 1980 - \$7.63, 1979 - \$6.63 and 1978 - \$5.54; and fully diluted earnings per share for 1981 - 7.29, 1980 - \$6.76, 1979 - \$5.81 and 1978 - \$4.84. See Note 2 of Notes to Financial Statements.

In June 1982, the Corporation reacquired \$165 million of debentures in exchange for cash and 1,919,311 shares of Common Stock resulting in an extraordinary gain of \$40.2 million (\$.76 primary earnings per share and \$.60 fully diluted earnings per share). See Note 3 of Notes to Financial Statements.

Effective January 1, 1981 the Corporation adopted the provisions of Statement of Financial Accounting Standard No. 52, "Foreign Currency Translation." See Note 2 of Notes to Financial Statements.

Primary earnings per share are based on the average number of shares of Common Stock outstanding during each year. Fully diluted earnings per share reflect the maximum dilution of per share earnings which would have occurred if all of the dilutive convertible securities of the Corporation had been converted on the dates of issue.

Equity per common share is based on shares outstanding at each year end.

The consolidated results of operations include Carrier Corporation from July 1, 1979 and Mostek Corporation from November 1, 1979.

Management's Discussion and Analysis of Results of Operations and Financial Position

The following discussion and analysis sets forth certain factors which produced changes in the Corporation's results of operations during the three years ended December 31, 1982, and comments on the Corporation's financial position at that date as presented in the accompanying financial statements. Operating results of the Corporation's business segments, reportable in accordance with Financial Accounting Standard No. 14, are shown in the Consolidated Summary of Business Segment Financial Data on pages 36 through 38 of this Annual Report. Attention is drawn, also, to Notes 2, 3 and 5 of Notes to Financial Statements regarding the effects of the change in method of accounting for investment tax credits and the extraordinary gain from the reacquisition of long-term debt in exchange for cash and Common Stock, both in 1982, and the adoption of Financial Accounting Standard No. 52, "Foreign Currency Translation," in 1981.

In addition to the factors noted below, continuing economic inflation drove up material prices, employee compensation and other costs, and the Corporation's selling prices to customers, although to a lesser extent in 1982 than in the preceding years. Data which may be helpful in assessing the impact of inflation is set forth in Note 17, "Changing Prices," in the accompanying financial statements.

Results of Operations

Sales:

decreased 1% or \$0.1 billion from 1981 to 1982; increased 11% or \$1.3 billion from 1980 to 1981.

While the indicated decrease in consolidated sales was 1% from 1981 to 1982, it is estimated that increases in selling prices to customers averaged 6% in 1982, indicating that the decrease in real volume of sales in 1982 was approximately 7%, due to the business recession and other factors discussed below. Approximately 75% of the sales increase in 1981 was due to increased selling prices to customers, and the remainder was due to increased volume and the introduction of new products.

Sales of the Corporation's principal business segments for the three years ended December 31, 1982 were:

In Millions of Dollars	1982	1981	1980
Power	\$5,271.6	\$5,566.7	\$4,861.6
Flight Systems	\$1,996.8	\$1,656.7	\$1,362.8
Building Systems Industrial Products for the Automotive, Electronics	\$3,683.8	\$3,741.6	\$3,375.3
and Other Industries	\$2,524.9	\$2,587.6	\$2,615.6

Power sales decreased by \$295.1 million, or 5%, in 1982 and increased by \$705.1 million, or 15%, in 1981. The decrease in 1982 reflected lower sales in the commercial airline and general aviation markets. Sales of engines and spare parts in these markets were down approximately 21% compared to 1981. The causes include airline overcapacity and financial constraints, decreased production of aircraft with the

Corporation's JT8D engine, the effect upon spare parts sales of reduced airline operations, and the general recession. Sales of military engines and spare parts increased by 10% compared to 1981.

The increase in Power segment sales in 1981 principally reflected higher sales of aircraft engines for the military and general aviation markets. The latter part of 1981 saw a softening in sales of engines and spare parts for commercial airline use, and that business was down approximately 4% from its 1980 level.

Flight Systems sales increased by \$340.1 million, or 21%, for 1982 and \$293.9 million, or 22%, for 1981. These increases resulted from higher sales of military helicopters, spare parts and other aircraft products. Sales of commercial helicopters were down significantly in 1981 and again in 1982, due to unfavorable conditions in the markets for such aircraft.

Building Systems segment revenues in 1982 were adversely affected to the extent of approximately \$375 million by less favorable foreign exchange rates than in 1981, for the translation of sales of foreign subsidiaries. Notwithstanding that, Building Systems revenues decreased only \$57.8 million, or 2%, for 1982, the net effect of a decrease in air-conditioning sales and an increase in elevator business. The lower air-conditioning sales resulted from depressed economic conditions in the construction industry. In 1981, Building Systems segment revenues increased 11%, or \$366.3 million, net of unfavorable foreign exchange rate impacts, reflecting higher sales in both the elevator and air-conditioning businesses.

Revenues related to Industrial Products were down 2%, or \$62.7 million, from 1981 as a result of lower sales in the automotive and semiconductor businesses, principally due to the business recession. Revenues related to Industrial Products in 1981 were down approximately 1%, or \$28.0 million, from 1980 as increased sales of automotive products were more than offset by lower sales of semiconductor products.

Other income, net, increased:

44% or \$42.2 million from 1981 to 1982; 28% or \$21.4 million from 1980 to 1981.

The increase in 1982 was due to lower foreign exchange losses charged against other income, and an increase in commission income. Also included was a gain, not material in amount, from the sale in the second quarter of 1982 of the Corporation's Jenn-Air subsidiary. The increase in other income in 1981 related principally to higher interest and royalty income, gains on disposal of fixed assets and other factors.

The Corporation adopted Financial Accounting Standard No. 52, "Foreign Currency Translation," effective January 1, 1981. Pursuant to that Standard, net foreign exchange

losses on certain transactions and on operations in highly inflationary economies of \$7.0 million in 1982 and \$12.1 million in 1981 were included in other income, compared to net gains of \$1.5 million so included in 1980, determined under FAS No. 8. The principal effect of the adoption of FAS No. 52 has been hat most of the large foreign exchange translation losses which have resulted from the strengthening of the U.S. dollar against foreign currencies in 1981 and 1982 have been deferred as a component of Shareowners' Equity, and accordingly did not affect reported earnings. (See Notes 2 and 5 of Notes to Financial Statements.)

Research and development expenses increased:

13% or \$98.7 million from 1981 to 1982;

11% or \$75.5 million from 1980 to 1981.

The rise in research and development expenses in both years was due principally to higher expenditures in the Power segment on advanced engine models. Expenditures in that segment are expected to increase further in 1983 because of continuing large expenditures for the development of the PW2037 engine and the PW4000 engine series.

> Selling, service and administrative expenses increased: 5% or \$89.6 million from 1981 to 1982;

9% or \$143.2 million from 1980 to 1981.

Selling, service and administrative expenses increased in both years as a result of generally higher expense levels and, in 1981, due to higher business volumes.

Interest expense increased:

2% or \$6.0 million from 1981 to 1982: 7% or \$15.0 million from 1980 to 1981.

Interest expense in 1982 was \$250.9 million. The increase ver 1981 was due to substantially higher average shortterm borrowings partially offset by a reduction in short-term interest rates in the latter part of the year. The increase in 1981 resulted from higher interest rates, partially offset by lower short-term borrowings in that year and higher amounts of interest capitalized. The weighted average interest rate paid on the Corporation's short-term borrowings in 1982 was 13.0% (16.3% in 1981 and 15.2% in 1980) and the average composite rate for short-term borrowings and long-term debt for 1982 was 11.5% (12.7% for 1981 and 12.3% for 1980). The average rate applicable to debt outstanding at December 31, 1982 was 10.7% for the short-term borrowings, and the average composite rate including long-term debt was 10.0%.

Operating profit:

decreased 15% or \$151.7 million from 1981 to 1982; increased 9% or \$82.8 million from 1980 to 1981.

Operating profits of the Corporation's principal business segments for 1982, 1981 and 1980 were:

In Millions of Dollars	1982	1981	1980
Power	\$420.4	\$596.4	\$356.4
Flight Systems	\$169. 3	\$105.5	\$ 73.6
Building Systems	\$257.1	\$285.2	\$305.7
Industrial Products for the Automotive, Electronics	•	,	,
and Other Industries	\$ 34.5	\$ 34.5	\$216.7

In the Power segment, the decrease in operating profit of \$176.0 million, or 30%, for 1982 was the result of the reduction of sales discussed above, the increase in research and development expenses, and loss provisions of approximately

\$25 million related to the bankruptcy of a major airline, partially offset by reduced costs of airline fleet introductory allowances. The increase in operating profit of 67%, or \$240.0 million, in 1981 reflected strength in the military and general aviation businesses, as well as in the commercial engine and spare parts business until a softening in that business occurred in the latter part of the year.

Operating profit gains of \$63.8 million, or 60%, and \$31.9 million, or 43%, for 1982 and 1981, respectively, in the Flight Systems segment reflect higher sales and substantially improved profitability in the Corporation's military helicopter business, together with gains in other businesses, principally military and defense, in the segment for both years.

The decrease in operating profit of the Building Systems segment in 1982 of \$28.1 million, or 10%, resulted from lower sales of air-conditioning equipment, costs of new product development and introduction, and the continuing strength of the U.S. dollar, which produced less favorable exchange rates than in the earlier year for the translation of foreign subsidiaries' earnings. These factors were, however, partially offset by improved volume and gross margins in the elevator business. Operating profit in the Building Systems segment for 1981 was down \$20.5 million, or 7%, from 1980, but the reduction was due entirely to less favorable translation of the earnings of foreign subsidiaries, because of the strengthening U.S. dollar.

In the Industrial Products segment, an operating profit of \$34.5 million was recorded for 1982, substantially the same as that reported in 1981, which was down from an operating profit of \$216.7 million in 1980. The decline in operating profit in 1981 was due entirely to losses in the segment's semiconductor business. In 1982 operating losses in that business were at a lower level, but there was a significant downturn in profitability in the wire and cable and automotive businesses. Since early 1981 the semiconductor industry has been experiencing conditions of low customer demand, overcapacity and intense price competition, which together with costs of new product development, resulted in operating losses in that business. A major restructuring program has been under way which significantly reduced the semiconductor losses in the second half of 1982. The 1982 reduction in profits of the wire and cable business reflected the low level of construction activity. The significant downturn in the segment's automotive business in 1982 was due to the depressed condition of the automotive industry, and costs of new product development. A reduction in inventory quantities relating to copper and other materials valued under the LIFO method had a favorable impact of approximately \$20 million on the operating profit of the Industrial Products segment in 1982; such impact was substantially offset, however, by excess costs on copper hedging contracts.

As a net result of the aforementioned, pretax income from operations:

decreased 13% or \$117.7 million from 1981 to 1982: increased 11% or \$88.4 million from 1980 to 1981.

In the fourth quarter of 1982, the Corporation's military and defense businesses, its elevator business, and its chemical specialty products business were operating at satisfactory sales levels despite the business recession, and are expected to continue to do so in 1983. Most of the other major businesses, including commercial and general aviation engines and spare

parts, commercial helicopters, air-conditioning, automotive, and semiconductors were operating at depressed levels due to the recession and to other factors discussed above. Management sees little probability for a significant sales upturn in those businesses in the first few months of 1983. The uncertainty as to the timing of economic recovery, together with high levels of research and development expenditures principally for new commercial engine models and the possibility of continuing unprofitability in the semiconductor business, indicates that the Corporation's operating profits will be under significant pressures in 1983, and this will be especially true in the early months of the year.

The effective income tax rate for U.S. federal, state and foreign income taxes was 42% for 1982, compared to 46% in 1981. The reduction in effective tax rate resulted primarily from the change to the flow-through method of accounting for investment tax credits (see Note 2 of Notes to Financial Statements) and from the effect of the U.S. tax credit for qualified research expenditures, enacted in 1981, along with

other factors.

Net income increased:

17% or \$76.0 million from 1981 to 1982; 16% or \$64.3 million from 1980 to 1981.

Net income for 1982 included the cumulative effect of a change in accounting method for investment tax credits, which increased net income by \$66.6 million, and an extraordinary gain of \$40.2 million from the reacquisition of \$165 million principal amount of the Corporation's debentures in exchange for cash and Common Stock. See Notes 2 and 3 of Notes to Financial Statements for an explanation of these matters, and see the Consolidated Statement of Income which presents their impact on net income and earnings per share of Common Stock. See Note 2 of Notes to Financial Statements concerning the effect of adoption, in 1981, of Financial Accounting Standard No. 52, "Foreign Currency Translation."

Earnings per share including the extraordinary item and cumulative effect of accounting change for 1982 increased, but at a lower rate than earnings applicable to Common Stock, principally as a result of the additional dilutive effect in 1982 of 5,000,000 shares of Common Stock issued in a public offering in March 1981 and the issuance of 1,919,311 shares of Common Stock in June 1982 in exchange for outstanding debentures. Earnings per share increased in 1981 but at a lower rate than the increases in earnings applicable to Common Stock, principally as a result of the issuance of the Common Stock in March 1981.

Financial Position

Management assesses the Corporation's liquidity in terms of its overall ability to mobilize cash to fund its operations. Of particular importance in the management of liquidity are funds generated by operations; levels of accounts receivable, inventories and fixed asset additions; adequate bank lines of credit; and financial flexibility to attract long-term capital on satisfactory terms.

The following tabulation summarizes, from the Consolidated Statement of Changes in Financial Position for the three years ended December 31, 1982, the funds generated by the Corporation's operations (net income adjusted for items not currently requiring or providing cash), and other sources and requirements for cash to meet operating needs including working capital and fixed asset expenditures.

In Millions of Dollars	1982	1981	1980
Funds generated by operations	\$ 790	\$ 825	\$ 867
(Increases) decreases in:			
Current and long-term			
receivables	(77)	19	(27)
Inventories	(134)	46	(418
Investments	(109)	8	(2
Fixed asset additions, net	(577)	(557)	(523
Changes in accounts payable	-		
and accruals	77	(77)	346
Other	(32)	(69)	(67
Net funds provided by (used for)	-		
operating transactions	\$ (62)	\$ 195	\$ (70

Accounts receivable and inventories increased in 1982, due mainly to the inclusion of businesses acquired during the year (Elektro-Finanz A.G. [the Isola Group] and certain communications businesses of General Dynamics Corporation) and high inventory levels resulting from the fall-off in commercial engine and spare parts business. High levels of accounts receivable and inventories are expected to continue through 1983, and their level will be affected by the business conditions, including the extent of economic recovery and inflation rates, in the businesses in which the Corporation operates.

The substantial fixed asset additions during the period 1980 through 1982, shown above, have been necessary to increase productivity, to keep the Corporation's facilities modern, and to provide for expansion of some product lines. Fixed asset expenditures are expected to increase in 1983 by as much as 40% over 1982.

As indicated in the foregoing tabulation, funds generated by operations in two of the three years were less than required for the fixed asset expenditures, working capital increments and other operating needs. In addition to such operating requirements, funds were necessary for maturing long-term debt of \$131 million in the three years, and for dividends to preferred and common shareowners. Also, in January 1982 the Corporation announced plans to repurchase its convertible preferred stock on the open market over an extended period of time if market prices are considered attractive, up to an amount of approximately \$100 million. In 1982, such purchases of preferred stock aggregated \$53 million and additional purchases may be made in 1983 if market conditions are favorable.

To meet its financing requirements, during the three years ended December 31, 1982 the Corporation increased its short-term borrowings as required, issued new long-term debt when conditions were considered favorable, and in March 1981 sold 5,000,000 shares of its Common Stock in a public offering, realizing \$258 million which was used to reduce short-term borrowings. In June 1982 the Corporation exchanged 1,919,311 shares of Common Stock and \$63 million of cash for \$165 million principal amount of its outstanding long-term

debentures. The debentures were retired. The exchange was tax free and was undertaken in order to take advantage of the substantial discounts at which the debentures were then trading. The results of these activities upon the Corporation's financial structure are shown in the following tabulation:

Millions of Dollars – December 31	1982	1981	1980
Short-term borrowings Long-term debt Shareowners' equity Debt to total capitalization	\$ 449	\$ 393	\$ 664
	\$ 982	\$ 907	\$ 893
	\$3,482	\$3,213	\$2,735
	29%	29%	36%

The ratio of debt to total capitalization is of particular significance as an indicator of the Corporation's potential ability to utilize the markets for short-term and long-term debt on favorable terms. That ratio improved in 1981, as shown above, as a result of the 5,000,000 share Common Stock offering and application of the proceeds to reduce short-term borrowings. The ratio of 29% at December 31, 1982 was maintained at the 1981 level. Management considers a debt to total capitalization ratio not in excess of 35% to be satisfactory.

In addition to the funds requirements discussed above, the Corporation's finance subsidiaries had financing commitments to customers of approximately \$750 million, of which \$236 million is expected to be disbursed in 1983.

At December 31, 1982, the Corporation had bank credit lines totaling \$2.0 billion (increased from \$1.5 billion at December 31, 1981), of which \$21 million had been borrowed and \$407 million served as informal backup for outstanding commercial paper of the Corporation and its unconsolidated finance subsidiaries. It is presently anticipated that an increase in short-term borrowings, within the available credit lines, will be required in 1983. Long-term debt offerings also will be considered in 1983 if conditions in the long-term debt markets make such offerings advantageous, and in that regard Registration Statements had been filed with the Securities and Exchange Commission at December 31, 1982 under which up to \$200 million of long-term debt of the Corporation, and up to \$300 million of long-term debt of UT Credit, might be issued. In January 1983 UT Credit issued \$100 million of 111/1/% Notes due January 15, 1993 under its Registration Statement. Management believes that available sources of funds should be adequate to meet its presently foreseeable cash requirements.

Comparative Stock Data

1982

1981

	High	Low	Dividend	High	Low	Dividend
mmon Stock						
First Quarter	43%	311/4	\$.60	$65\frac{3}{4}$	$50\frac{7}{8}$	\$.60
Second Quarter	40 %	35	.60	61	$54\frac{3}{4}$.60
Chird Quarter	$50\frac{1}{2}$	$36\frac{1}{2}$.60	$55\frac{1}{2}$	40	.60
Fourth Quarter	58 %	45 %	.60	$47\frac{1}{4}$	401/4	.60
55 Preferred Stock	,0	,,			, -	
First Quarter	21%	$19\frac{1}{2}$	\$.6375	281/4	$24\frac{3}{8}$	\$.6375
Second Quarter	$22\frac{\%}{8}$	$20\frac{\%}{8}$.6375	$27\frac{7}{8}$	$25\frac{\%}{2}$.6375
Chird Quarter	25	$21\frac{\%}{8}$.6375	$25\frac{7}{8}$	20	.6375
Fourth Quarter	$28\frac{1}{8}$	$24\frac{5}{8}$.6375	$22\frac{3}{8}$	$20\frac{3}{8}$.6375
875 Preferred Stock	70	78		70	70	
irst Quarter	$54\frac{1}{2}$	391/2	\$.96875	$80\frac{7}{8}$	64	\$.96875
Second Quarter	$51\frac{\%}{4}$	$43\frac{3}{4}$.96875	$75\frac{3}{4}$	$68\frac{1}{2}$.96875
Chird Quarter	$62 \overset{\leftarrow}{\%}$	$45\frac{7}{8}$.96875	$69\frac{1}{2}$	$50\frac{3}{4}$.96875
ourth Quarter	73 ~~	$57\frac{\%}{4}$.96875	$58\frac{3}{4}$	$50\frac{5}{8}$.96875
00 Preferred Stock		/-		7-	76	
First Quarter	1871/2	140	\$2.00	271	250	\$2.00
Second Quarter	$172\frac{\%}{4}$	$132\frac{1}{4}$	2.00	$265\frac{1}{8}$	246	2.00
Chird Quarter	215	$175\frac{1}{2}$	2.00	$189\frac{\%}{2}$	$189\frac{1}{2}$	2.00
Fourth Quarter	248	219	2.00	203	183	2.00
•						

he Corporation's Common and \$2.55, \$3.875 and \$8.00 Preferred Stocks are listed on the New York Stock Exchange.

The high and low prices are based on the Composite Tape.

The number of shareowners of record at December 31, 1982 were: Common Stock - 47,754, \$2.55 Preferred Stock - 21,937, \$3.875 Preferred **Stock** -5,052 and \$8.00 Preferred Stock -2,125.

Quarter	Fnded
wuarter	ranaea

In Thousands of Dollars (except per share amounts)	March 31	June 30	September 30	December 31	For the Yea
1982	<u> </u>				
Sales	\$3,214,052	\$3,513,636	\$3,306,486	\$3,542,955	\$13,577,12
Gross Profit	\$ 868,883	\$ 929,562	\$ 883,283	\$ 939,250	\$ 3,620,97
Income Before Extraordinary Item and Cumulative Effect of Change in	+,-	•,-	·,-	*,	¥ -,,-
Accounting Principle	\$ 95,518	\$ 105,330	\$ 113,195	\$ 112,831	\$ 426,87
Net Income	\$ 162,139	\$ 145,556	\$ 113,195	\$ 112,831	\$ 533,72
Preferred Stock Dividend Requirement	\$ 18,278	\$ 17,594	\$ 16,854	\$ 16,844	\$ 69,57
Earnings Applicable to Common Stock	\$ 143,861	\$ 127,962	\$ 96,341	\$ 95,987	\$ 464,15
Per Share of Common Stock:					
Income Before Extraordinary Item and					
Cumulative Effect of Change in					
Accounting Principle:	A.	** **			
Primary P. H. Diller I.	\$1.49	\$1.68	\$1.78	\$1.78	\$6.7
Fully Diluted	\$1.45	\$1.60	\$1.68	\$1.68	\$6.4
Net Income:	6 0 77	60 45	#1 70	#1 70	# 0.7
Primary* Fully Diluted*	\$2.77 \$2.46	\$2.45 \$ 2.21	\$1.78 \$1.68	\$1.78 \$1.68	\$8.7 \$8.0
runy Dhuteu	φ2.40	44.41	41.00	\$1.00	₩0. U
1981					
Sales	\$3,334,606	\$3,563,089	\$3,259,432	\$3,510,631	\$13,667,75
Gross Profit	\$ 879,780	\$ 938,448	\$ 868,384	\$ 899,884	\$ 3,586,49
Net Income	\$ 113,574	\$ 122,837	\$ 123,764	\$ 97,511	\$ 457,68 \$ 76,8?
Preferred Stock Dividend Requirement	\$ 20,153	\$ 20,041	\$ 18,364	\$ 18,277	
Earnings Applicable to Common Stock	\$ 93,421	\$ 102,796	\$ 105,400	\$ 79,234	\$ 380,85
Earnings Per Share:	# 0.0 #	40.00	40.05	0.7.7.1	0.5
Primary	\$2.07	\$2.08	\$2.05	\$1.51	\$7. 7
Fully Diluted*	\$1.84	\$1.86	\$1.87	\$1.45	\$7.0
Pro Forma Assuming Retroactive Application					
of Change in Accounting Principle:	\$ 117,659	\$ 127,969	\$ 128,377	\$ 99,575	\$ 473,58
Net Income Per Share of Common Stock:	\$ 117,659	ф 127,969	Ф 120,377	\$ 99,575	φ 413,00
Primary	\$2.16	\$2.18	\$2.15	\$1.54	\$8.0
Fully Diluted	\$1.90	\$1.94	\$1.95	\$1.50	\$7.2
1: U11 V 1711 U15 U	ΨΙ.ΘΟ	ΨΙ.ΟΥ	ΨΙ.ΟΟ	φ1.00	Ψ1.20

Notes: Effective January 1, 1982, the Corporation changed its method of accounting for investment tax credits from the deferral method to the flow-through method as more fully described in Note 2 of Notes to Financial Statements. The cumulative effect of \$66.6 million representing prior years' investment tax credit has been included in the quarter ended March 31, 1982.

The quarter ended June 30, 1982 includes an extraordinary gain of \$40.2 million resulting from the exchange of cash and 1,919,311 shares of Common Stock of the Corporation for \$165 million principal amount of debentures. See Note 3 of Notes to Financial Statements.

*In 1982, average common shares outstanding for the year were greater than such shares in the first and second quarters, when the cumulative effect of the accounting change and the extraordinary gain were reported. Also, in the fourth quarter of 1981 the Corporation's \$2.55 Preferred Stock was antidilutive. As a result, earnings per share in 1982, and fully diluted earnings per share in 1981, for the individual quarters, do not equal the per share amounts for the year.

Management's Responsibility for Financial Statements

Report of Independent Accountants

The financial statements of United Technologies Corporation and consolidated subsidiaries, and all other information presented in this Annual Report, are the responsibility of the management of the Corporation. The financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied except for the accounting changes described in Note 2 of Notes to Financial Statements, with which our independent accountants concur.

Management is responsible for the integrity and objectivity of the financial statements, including estimates and judgments reflected in them. It fulfills this responsibility primarily by establishing and maintaining accounting systems and practices adequately supported by internal accounting controls. These controls include the selection and training of management and supervisory personnel; an organization structure providing for delegation of authority and establishment of responsibilities; communication of requirements for compliance with approved accounting, control and business practices throughout the organization; business planning and review; and a program of internal audit. Management believes the internal accounting controls in use provide reasonable assurance that the Corporation's assets are safeguarded, that transactions are executed in accordance with management's authorizations, and that the financial records are reliable for the purpose of preparing financial statements.

Independent accountants are elected annually by the Corporation's shareowners to examine the financial statements in accordance with generally accepted auditing standards. Their report appears in this Annual Report. Their examinations, as well as those of the Corporation's internal audit department, include a review of internal accounting controls and selective tests of transactions.

The Audit Review Committee of the Board of Directors, consisting of six directors who are not officers or employees of the Corporation, meets regularly with management, the independent accountants and the internal auditors, to review matters relating to financial reporting, internal accounting controls, and auditing.

To the Shareowners of United Technologies Corporation

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, changes in shareowners' equity and of changes in financial position present fairly the financial position of United Technologies Corporation and its subsidiaries at December 31, 1982 and 1981, and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1982, in conformity with generally accepted accounting principles consistently applied during the period except for the changes, with which we concur, in the method of accounting for investment tax credits and the method of accounting for foreign currency translation as described in Note 2 of Notes to Financial Statements. Our examinations of these statements were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Saterhonse

One Financial Plaza Hartford, Connecticut January 26, 1983

	Years Ended December 31,					
In Thousands of Dollars (except per share amounts)		1982		1981		1980
Revenues:						
Sales	\$13	3,577,129	\$1	3,667,758	\$1:	2,323,994
Other income, less other deductions		139,000		96,839		75,397
	\$1 3	3,716,129	\$1	3,764,597_	\$13	2,399,391
Costs and Expenses:	• (Φ1	2 201 200	Φ.	2 200 161
Cost of goods and services sold Research and development	\$ 3	9,956,151 834,476	\$1	0,081,262 735,825	\$	9,038,161 660,296
Selling, service and administrative expenses	:	1,916,892		1,827,256		1,684,046
Interest expense		250,886		244,839		229,848
•	\$12	2,958,405	\$1	2,889,182	\$1	1,612,351
Income before income taxes	\$	757,724		875,415	\$	787,040
Income taxes	T	318,244	•	402,691	*	373,844
Income before minority interests	\$	439,480	\$	472,724	\$	413,196
Less – Minority interests in subsidiaries' earnings	·	12,606		15,038		19,813
Income before extraordinary item and cumulative effect of change						
in accounting principle	\$	426,874	\$	457,686	\$	393,383
Extraordinary gain Cumulative effect of change in accounting principle		40,226 66,621		_		
Cumulative effect of change in accounting principle	<u> </u>			457 696	e	202 222
Net Income		533,721	\$	457,686	\$	393,383
Preferred Stock Dividend Requirement	\$	69,570	\$	76,835	\$	81,239
Earnings Applicable to Common Stock	\$	464,151	\$	380,851	\$	312,14.
Per Share of Common Stock:		· 				
Primary:						
Income before extraordinary item and cumulative effect of change in accounting principle		\$ 6.73		\$7.71		\$7.28
Extraordinary gain		.76		Ψ		ψ1. <u>2</u> 0
Cumulative effect of change in accounting principle		1.25				
Net Income		\$8.74		\$7.71		\$7.28
Fully Diluted:			_			
Income before extraordinary item and cumulative effect of change						
in accounting principle		\$6.41		\$7.05		\$6.51
Extraordinary gain		.60		_		_
Cumulative effect of change in accounting principle		1.00				
Net Income		\$8.01		\$7.05		\$6.51
Pro forma assuming retroactive application of change in accounting						
principle:	_				_	
Income before extraordinary item Per Share of Common Stock	\$	426,874	\$	473,580	\$	408,305
Primary earnings		\$ 6.73		\$8.03		\$7.6 3
Fully diluted earnings		\$6.41		\$7.29		\$6.76
Net Income	\$	467,100	\$	473,580	\$	408,305
Per Share of Common Stock						
Primary earnings		\$7.49		\$8.03		\$7.63
Fully diluted earnings		\$7.01		\$7.29		\$6.76

See accompanying Notes to Financial Statements

	December 31,		
In Thousands of Dollars	1982	1981	
Assets			
Current Assets:		A 10=0==	
Cash and short-term cash investments	\$ 121,471	\$ 167,955	
Accounts receivable	1,552,304	1,506,740	
Inventories and contracts in progress Less — Progress payments and billings on contracts in progress	4,968,588 (2,102,596)	4,600,221 (1,868,063)	
Prepaid expenses	64,005	81,673	
Total Current Assets	\$4,603,772	\$4,488,526	
Accounts and notes receivable due after one year	\$ 152,388	\$ 118,771	
Unconsolidated subsidiaries and other investments		\$ 166,021	
	\$ 298,436	\$ 100,021	
Fixed Assets, at cost: Land	\$ 137,917	\$ 140,707	
Buildings and improvements	1,360,570	1,258,142	
Machinery, tools and equipment	2,800,279	2,417,664	
Under construction	242,474	275,626	
	\$4,541,240	\$4,092,139	
Less - Accumulated depreciation and amortization	(2,155,103)	(1,888,817)	
•	\$2,386,137	\$2,203,322	
Deferred Charges:			
Costs in excess of net assets of acquired companies (net of amortization)	\$ 532,428	\$ 562,988	
Other	20,215	15,475	
	\$ 552,643	\$ 578,463	
Total Assets	\$7,993,376	\$7,555,103	
Tichillies and Characters, Equity			
Liabilities and Shareowners' Equity Current Liabilities:			
Short-term borrowings	\$ 449,391	\$ 392,762	
Accounts payable	871,092	869,942	
Accrued salaries, wages and employee benefits	586,271	509,553	
Other accrued liabilities	781,539	718,264	
Long-term debt — currently due	55,153	74,378	
Income taxes:	101 000	1.40.550	
Currently payable	101,032	140,750	
Deferred Advances on sales contracts	86,114 119,076	64,982	
		143,913	
Total Current Liabilities	\$3,049,668	\$2,914,544	
Deferred income taxes, and investment tax credits in 1981	\$ 246,261	\$ 283,817	
Long-term debt	\$ 927,180	\$ 832,398	
Other long-term liabilities	\$ 219,888	\$ 232,168	
Commitments and contingent liabilities (Note 15)		A =0.00=	
Minority interests in subsidiary companies	\$ 68,589	\$ 79,665	
Shareowners' Equity:			
Capital Stock:			
Preferred Stock, \$1 par value (Authorized — 100,000,000 shares) Outstanding — 24,330,271 and 26,368,013 shares, respectively	\$ 697,774	\$ 751,227	
(Aggregate liquidating preference — \$706,006,000)	φ 031,114	Ψ 101,221	
Common Stock, \$5 par value (Authorized — 200,000,000 shares)			
Outstanding — 54,299,592 and 51,881,454 shares, respectively	1,143,981	1,058,729	
Deferred foreign currency translation adjustments	(157,666)	(60,047)	
Retained earnings	1,797,701	1,462,602	
Total Shareowners' Equity	\$3,481,790	\$3,212,511	
Total Liabilities and Shareowners' Equity	\$7,993,376	\$7,555,103	
See accompanying Notes to Financial Statements		. ,,	
bec accompanying roces to r mancial Statements			

Consolidated Statement of Changes in Financial Position

	Years Ended December 31,			
In Thousands of Dollars	1982	1981	198	
Funds provided by (used for) operating transactions:				
Net income	\$ 533,721	\$ 457,686	\$ 393,38	
Items not requiring or providing cash:		, , , , ,	, ,	
Depreciation	325,811	277,630	226,29	
Amortization of goodwill	23,128	26,256	27,17	
Change in deferred income taxes	49,399	75,600	216,00	
Minority interests in subsidiaries' earnings	12,606	15,038	19,81	
Extraordinary gain	(40,226)		<u> </u>	
Cumulative effect of change in accounting principle	(66,621)	_		
Other	(47,820)	(27,519)	(16,16	
Total funds generated by operations	\$ 789,998	\$ 824,691	\$ 866,50	
(Increase) decrease in current and long-term receivables	(76,948)	19,070	(272,79	
(Increase) decrease in inventories	(133,834)	46,335	(417,72	
Increase (decrease) in accounts payable and accrued liabilities	76,588	(77,024)	345,62	
Additions to fixed assets, net of retirements	(576,871)	(557,195)	(522,57)	
(Increase) decrease in investments	(108,837)	8,546	(1,88	
Other	(32,363)	(69,032)	(67,47)	
Net Funds Provided by (Used For) Operating Transactions	\$ (62,267)	\$ 195,391	\$ (70,31)	
Funds provided by (used for) financing activities:				
Debt transactions:				
Issuance of long-term debt	\$ 327,275	\$ 58,348	\$ 100,000	
Repayments of long-term debt	(200,308)	(35,200)	(152,03:	
Increase (decrease) in short-term borrowings	56,629	(270,786)	227,07	
Other	(80)	(4,580)	22,24	
Equity transactions:				
Common Stock issued	65,562	258,474	_	
Preferred Stock repurchased	(53,286)	(5,570)	(2	
Other	16,826	19,821	26,82	
Dividends paid on Common and Preferred Stocks	(196,835)	(194,971)	(175,680	
Net Funds From (Used For) Financing Activities and Dividends	\$ 15,783	\$(174,464)	\$ 48,402	
Net Increase (Decrease) in Cash and Short-Term Cash Investments	\$ (46,484)	\$ 20,927	\$ (21,91	

Notes: Changes in assets and liabilities shown above include assets and liabilities acquired in business acquisitions. Such amounts were not material in the three years ended December 31, 1982.

For 1982, the Corporation has changed its method of presenting the Consolidated Statement of Changes in Financial Position from an analysis of change in working capital to an analysis of change in cash and short-term cash investments. The 1981 and 1980 Statements have been restated accordingly.

See accompanying Notes to Financial Statements

Consolidated Statement of Changes in Shareowners' Equity

See accompanying Notes to Financial Statements

In Thousands of Dollars \$3.875 Deferred \$4.50 \$2.55 \$7.32 \$8.00 Translation Preferred Preferred Preferred Preferred Preferred Common Retained Three Years Ended December 31, 1982 Stock Stock Stock Stock Stock Stock Adjustments Earnings Balance December 31, 1979 **\$543,510 \$188,040 \$106,250** \$30.047 \$ 631.379 \$ \$ 984,406 \$3,524 Issued on conversion of convertible debentures (131,046 shares) 3,707 Issued on conversion of 279,322 shares of Preferred Stock (1,005,371 shares) 25,216 **(1)** (542)(11,206) (13,491)Issued under employee incentive plans, and related tax benefit: 261,904 shares of Preferred Stock 145 246 4,441 544,033 shares of Common Stock, including 39,640 shares purchased and reissued (486)21,996 Purchase of 542 shares of Preferred Stock (54)Net income 393,383 Dividends on: Common Stock (\$2.20 per share) (94,447)Preferred Stock (81,239)Balance December 31, 1980 **\$3,470 \$551,657 \$187,643 \$** 95,290 \$16,556 \$ 678,591 \$1,201,646 Issued on conversion of convertible debentures (90,052 shares) 2,564 Issued on conversion of 1,132,672 shares of Preferred Stock (2,866,517 shares) (30)(8,061)(90,973)(4,549)103,475 Issued under employee incentive plans, and related tax benefit: 191,666 shares of Preferred Stock, including 4,097 shares purchased and reissued 3,401 32 152 (10)349.962 shares of Common Stock, including 157,905 shares purchased and reissued 18,189 (2,104)Redemption and purchase of 59,151 shares of Preferred Stock (1,456)(4,469)355 **Issuance of Common Stock** (5,000,000 shares)258,474 Deferred foreign currency translation adjustments: Opening period adjustment (6.024)Translation adjustments (50,911)Income tax adjustments (3,112)Net income 457,686 Dividends on: Common Stock (\$2.40 per share) (118,136)Preferred Stock (76,835)3alance December 31, 1981 \$2,014 \$557,592 \$179,614 \$ \$12,007 \$1,058,729 \$(60,047) \$1,462,602

Consolidated Statement of Changes in Shareowners' Equity continued

In Thousands o	f Dollars
----------------	-----------

				III TIIOUS	unus or 1501	1015		
	\$4.50 Preferred Stock	\$2.55 Preferred Stock	\$3.875 Preferred Stock	\$7.32 Preferred Stock	\$8.00 Preferred Stock	Common Stock	Deferred Translation Adjustments	Retaine Earning
Balance December 31, 1981	\$2,014	\$557,592	\$179,614	\$ -	\$12,007	\$1,058,729	\$(60,047)	\$1,462,602
Issued on conversion of convertible debentures (32,150 shares)		911						
Issued on conversion of 57,642 shares of Preferred Stock (147,938 shares)		(8)	(1,577)		(2,057)	3,636		
Issued under employee incentive plans, and related tax benefit: 94,997 shares of Preferred Stock, including 462 shares		(=)	(2,311,		(=,==+,	3,000		
purchased and reissued 350,889 shares of Common Stock, including 111,722 shares purchased and		1,548	59					
reissued Redemption and purchase of						16,054		(830
2,107,247 shares of Preferred Stock	(15)	(39,034)	(13,280)					(957
Issuance of Common Stock in exchange for debentures (1,919,311 shares)	(10)	(00,004)	(10,200)			65,562		(001
Deferred foreign currency						00,002		
translation adjustments: Translation adjustments Income tax adjustments Sale of foreign investments							(94,252) (3,507) 140	
Net income								533,721
Dividends on: Common Stock (\$2.40 per share) Preferred Stock								(127,265) (69,570)
Balance December 31, 1982	\$1,999	\$521,009	\$164,816	\$ -	\$ 9,950	\$1,143,981	\$(157,666)	\$1,797,701

See accompanying Notes to Financial Statements

Notes to Financial Statements

Note 1

Summary of Accounting Principles: The consolidated financial statements include the accounts of the Corporation and its domestic and international subsidiaries. The only significant exceptions are unconsolidated finance subsidiaries and a real estate subsidiary which are accounted for under the equity method. International operating subsidiaries are included generally on the basis of fiscal years ending November 30.

Sales under government and commercial fixed-price contracts and government fixed-price-incentive contracts are recorded at the time deliveries are made. Sales under cost-reimbursement contracts are recorded as work is performed and billed. Sales under elevator and escalator installation and modernization contracts are accounted for under the percentage of completion method. Service contract revenues are recorded as sales when earned.

Inventories and contracts in progress are stated at the lower of cost or estimated realizable value. Inventories consist largely of raw materials and work in process. Materials in excess of requirements for contracts and orders currently in effect or anticipated have been eliminated. A considerable portion of the inventories is based on cost standards which are adjusted to reflect approximate current costs. The remainder of the inventories is stated either at average cost or at actual cost accumulated against specific contracts or orders or, in the case of a substantial portion of inventories in the building systems and industrial products businesses, at last-in, first-out (LIFO) cost. Manufacturing tooling costs are charged to inventories or to fixed assets depending upon their nature, general applicability and useful lives. Tooling costs included in inventory are charged to cost of sales based on usage, generally within two years after they enter productive use. All other manufacturing costs are allocated to current production; no such costs are deferred and assigned to future production.

Contracts in progress relate to elevator and escalator contracts and include standard cost of manufactured components, actual installation cost, and estimated earnings on uncompleted contracts.

Prospective losses, if any, on contracts are provided for when the losses become anticipated. Loss provisions are based upon any anticipated excess of inventoriable manufacturing or engineering cost over the selling price of the contract. Fleet introductory assistance allowances to commercial airline customers for new engine models and new engine applications are similarly charged off at the time firm orders are received from customers, if and to the extent that such allowances are in excess of expected gross margins of the products contemplated by the specific order.

Research and development costs not specifically covered by contracts are charged against income as incurred. General and administrative expenses also are charged against income as incurred. Costs pertaining to fulfillment of the Corporation's warranty and service policies and product guarantees are estimated on the basis of past experience and current product performance and, where believed to be significant and

reasonably predictable in amount, are accrued at the time products are sold.

Current assets and current liabilities include items expected to be, or which may be, realized or liquidated during the next year.

Provisions for depreciation of plant and equipment related to the Corporation's aerospace operations have generally been made on accelerated methods. Provisions for depreciation of other plant and equipment have generally been made on the straight-line method. Wherever possible, accelerated methods are used for income tax purposes. Generally, estimated useful lives used for financial statement depreciation purposes range from 30 to 50 years for buildings and improvements, from 8 to 20 years for machinery and equipment, and from 5 to 10 years for office equipment. Improvements to leased property are amortized over the life of the lease.

Costs in excess of values assigned to the underlying net assets of acquired companies are included in deferred charges and are generally being amortized over 25 years.

Provisions for income taxes are based upon income and expenses recorded in accordance with the Corporation's regular accounting practices, and as shown in the financial statements. The income tax effects of differences in the time when income and expenses are reflected in accordance with such regular accounting practices and the time they are recognized for income tax purposes are shown in the balance sheet as deferred income taxes. Generally, provision has not been made for federal income taxes on undistributed earnings of international subsidiaries, since a substantial portion of such earnings is reinvested and the Corporation believes that income taxes otherwise payable upon repatriation of earnings not reinvested would be largely offset by available foreign tax credits.

In 1982, the method of accounting for the investment tax credit was changed from the deferral method to the flow-through method (see Note 2). Under the flow-through method, the provision for federal income taxes is reduced by investment tax credits in the year the related assets are placed in service.

Earnings per share computations are based on the average number of shares of Common Stock outstanding during the year. Fully diluted earnings per share reflect the maximum dilution of per share earnings which would have occurred if all of the dilutive convertible securities of the Corporation had been converted on the dates of issue. Such earnings reflect the elimination of Convertible Subordinated Debenture interest, less applicable federal income taxes, and dividends on Convertible Preferred Stock.

Note 2

Accounting Changes: Effective January 1, 1982, the Corporation changed its method of accounting for investment tax credits from the deferral method to the flow-through method in order to achieve greater comparability with the accounting practices of most other industrial concerns and, in the opinion of the Corporation, to more accurately reflect the

economic impact of investment decisions on reported earnings. Under the flow-through method, the provision for federal income taxes is reduced by investment tax credits in the year the related assets are placed in service, rather than deferring such investment tax credits and amortizing them over the estimated useful lives of the related assets.

The effect of the change in 1982 was to increase net income by \$81,425,000 or \$1.53 per share on a primary basis and \$1.22 per share on a fully diluted basis, of which \$66,621,000 (\$1.25 primary earnings per share and \$1.00 fully diluted earnings per share) represents the cumulative effect of investment tax credits through 1981 and \$14,804,000 (\$.28 primary earnings per share and \$.22 fully diluted earnings per share) represents the net effect of 1982 investment tax credits. Pro forma earnings and related per share amounts as if the flow-through method had been adopted retroactively are included in the Consolidated Statement of Income.

Effective January 1, 1981, the Corporation adopted the provisions of Statement of Financial Accounting Standard No. 52, "Foreign Currency Translation," which was issued in December 1981, as explained more fully in Note 5. The portion of the net exchange losses deferred as a component of Shareowners' Equity in 1981, which would have been charged against income under the previously effective Financial Accounting Standard, amounted to \$42,706,000, net of income tax effects, equivalent to \$.86 primary earnings per common share, or \$.66 per share on a fully diluted basis. After reflecting the adoption of FAS No. 52, earnings were charged or credited with foreign exchange (losses) and gains of \$(7,004,000), \$(12,145,000) and \$1,480,000 in 1982, 1981 and 1980, respectively.

Note 3

Extraordinary Gain: In June 1982 the Corporation exchanged 1,919,311 shares of Common Stock valued at \$65,611,000 and cash of \$63,039,000, for \$133,400,000 principal amount of its outstanding 9\%\% debentures due January 15, 2004, \$24,580,000 principal amount of 9\%\% debentures due April 15, 2000, \$5,906,000 principal amount of 8\%\% debentures due 1996 and \$1,150,000 principal amount of 7\%\% debentures due 1998. The exchange resulted in an extraordinary gain, which is not subject to income taxes, of \$40,226,000 (\$.76 primary earnings per share and \$.60 fully diluted earnings per share) after deducting unamortized debt discount and other related expenses. The dilutive effect of the issuance of the shares of Common Stock was not material in amount.

Note 4

Interest Expense: During 1982 the Corporation and its consolidated subsidiaries incurred interest cost of \$287,902,000 (\$286,989,000 in 1981 and \$260,622,000 in 1980) and, pursuant to Statement of Financial Accounting Standard No. 34, "Capitalization of Interest Cost," capitalized \$37,016,000 (\$42,150,000 in 1981 and \$30,774,000 in 1980) of the total to be depreciated over the lives of the related fixed assets.

Note 5

International Operations: A substantial portion of the Corporation's revenues and assets relate to international operations. The Corporation has significant manufacturing facilities in Canada, France, Italy, the United Kingdom, Spain, Switzerland and Japan and operations of lesser size in a number of other countries. The investment (identifiable assets) in any single country other than the United States does not exceed 3% of the Corporation's total identifiable assets, except for investments in Canada which amounted to 6% of total identifiable assets at December 31, 1982. Amounts included in the accompanying consolidated financial statements associated with operations outside the United States consist of the following:

In Thousands of Dollars	1982	1981	198
Sales	\$2,888,962	\$3,019,024	\$2,931,633
Net income	\$ 113,572	\$ 189,707	\$ 167,049
Assets	\$2,427,613	\$2,150,085	\$2,025,155
Liabilities	\$1,513,858	\$1,451,265	\$1,358,388
Minority interests	\$ 68,589	\$ 79,665	\$ 80,902

Pursuant to Financial Accounting Standard No. 52, which was adopted by the Corporation effective January 1, 1981 (see Note 2), the financial position and results of operations of substantially all of the Corporation's significant foreign subsidiaries are measured using local currency as the functional currency. Assets and liabilities of such subsidiaries have been translated at current exchange rates, and related revenues and expenses have been translated at average-for-the-year exchange rates. The aggregate effect of translation adjustments (losses) so calculated, including the opening period adjustment in 1981, together with net gains from hedging exposed net asset positions less related tax effects, is being deferred as a separate component of Shareowners' Equity, until there is a sale or liquidation of the underlying foreign investments. At December 31, 1982, \$157,666,000 had been so deferred (\$60,047,000 at December 31, 1981) as a result of the

strengthening during 1981 and 1982 of the U.S. dollar against most major foreign currencies, particularly the Canadian dollar, French franc, Swiss franc and Japanese yen. The Corporation has no present plans for sale or liquidation of significant investments to which these deferrals relate.

The economies of Brazil and, beginning in 1982, Mexico have been determined to be highly inflationary. Accordingly, under FAS No. 52, the U.S. dollar is deemed to be the functional currency of subsidiaries in those countries, and all translation gains and losses are taken into income; such amounts, losses, aggregated \$3,600,000 in 1982 and \$7,464,000 in 1981.

Note 6

Accounts Receivable: Allowances for doubtful accounts of \$68,456,000 and \$69,238,000 have been applied as a reduction of current accounts receivable at December 31, 1982 and 1981, respectively.

Current accounts receivable include amounts which represent retainage under contract provisions and amounts which are not presently billable because of lack of funding or final prices or contractual documents under government contracts or for other reasons. These items are not material in amount and are expected to be collected in the normal course of business.

Note 7

Inventories and Contracts in Progress: Inventories and contracts in progress at December 31, 1982 consisted of inventories of \$4,160,543,000 (\$3,851,180,000 at December 31, 1981) and elevator and escalator contracts in progress of \$808,045,000 (\$749,041,000 at December 31, 1981).

The principal elements of cost included in inventories are materials, purchased components, direct labor and manufacturing overhead (engineering overhead in the case of engineering contracts). Amounts of tooling and other costs included in inventories are not significant.

A substantial portion of the Corporation's inventories in its building systems and industrial products businesses is valued under the LIFO method. If these inventories had been valued at the lower of replacement value or cost under the first-in, first-out method, they would have been higher by \$186,138,000 at December 31, 1982 (\$218,888,000 at December 31, 1981).

The book basis of LIFO inventories exceeded the tax basis of such inventories by approximately \$73,754,000 at December 31, 1982 (\$76,904,000 at December 31, 1981). In 1982 and 1980, income before income taxes on a LIFO book basis was approximately \$3,150,000 and \$6,053,000, respectively, less than that on a tax basis. These differences result from the assignment of fair value to inventories acquired in a business acquisition which has been accounted for as a purchase transaction.

The methods of accounting followed by the Corporation do not permit classification of inventories by categories of finished goods, work in process and raw materials. The Corporation's sales contracts in many cases are long-term contracts expected to be performed over periods exceeding twelve months. Approximately 76 percent (75 percent at December 31, 1981) of total inventories and contracts in progress have been acquired or manufactured under such long-term contracts. It is impracticable for the Corporation to determine the amounts of inventory scheduled for delivery under long-term contracts within the next twelve months.

Progress payments, secured by lien, on United States Government contracts, and billings on contracts in progress amounted to \$1,197,963,000 (\$1,024,253,000 at December 31, 1981) and \$904,633,000 (\$843,810,000 at December 31, 1981), respectively, at December 31, 1982.

Note 8<u>Unconsolidated Subsidiaries and Other Investments:</u>
Investments consist of the following:

In Thousands of Dollars	1982	1981
Finance subsidiaries Real estate subsidiary Other companies	\$199,586 25,477 73,373	\$115,446 - 50,575
	\$298,436	\$166,021

Finance Subsidiaries:

The Corporation's investments in its finance subsidiaries — UT Credit Corporation (UT Credit), Carrier Distribution Credit Corporation (CDCC), and effective June 26, 1982, UT Communications Credit Corporation (UTCCC) — are carried at underlying equity, as shown in the finance subsidiaries' financial statements, and advances. The Corporation's equity in the net income of the finance subsidiaries attributable to external sources has been included in other income. The portion of the finance subsidiaries' income before taxes relating to intercompany financing has been included as a reduction of interest expense.

The combined, condensed financial data set forth below have been summarized from the audited financial statements of UT Credit, CDCC, and UTCCC:

In Thousands of Dollars	1982	1981	1980
Income:			
Interest, lease and other	\$36,547	\$ 31,851	\$22,246
Intercompany interest	63,089	69,946	48,190
	\$99,636	\$101,797	\$70,436
Expenses:		• • • • • • •	***
Interest	\$51,554	\$ 58,897	\$36,637
Administrative	3,549	5,732	3,042
Income taxes	18,689	17,586	14,135
	\$73,792	\$ 82,215	\$53,814
Cumulative effect of change		•	
in accounting principle	\$ 3,543		<u> </u>
Net Income	\$29,387	\$ 19,582	\$16,622
In Thousands of Dollars	 	1982	1981
Assets:			
Cash and short-term cash			
investments		\$ 912	\$ 6,872
Accounts and notes receivable		616,663	596,028
Financing leases receivable, r	et of		
unearned income		78,853	73,667
Other		23,458	11,632
		\$719,886	\$688,199
Liabilities and Shareholder's			
Equity:			
Commercial paper and other			
short-term borrowings		\$230,143	\$278,193
Accrued liabilities		17,474	18,946
Long-term debt of UT Credit	t:		
8%% Notes due 1986		50,000	50,000
$8\frac{1}{4}\%$ Notes due 2002		75,000	75,000
8.85% Debentures due 2003		75,000	75,000
9% Subordinated Debentur	res due		
2003		25,000	25,000
Intercompany loans		54,990	_
Long-term debt of CDCC:			
8 % Senior Subordinated	Notes		
0% being Suborumated		10,000	10,000
due 1983-1992			
due 1983-1992 Deferred income taxes, and			
due 1983-1992 Deferred income taxes, and investment tax credits in 1	981	37,445	40,614
due 1983-1992 Deferred income taxes, and investment tax credits in 1 Capital stock	981	45,001	45,000
due 1983-1992 Deferred income taxes, and investment tax credits in 1	981		

Scheduled maturities of long-term notes and leases receivable of the finance subsidiaries for the next five years are: \$24,090,000 in 1983; \$24,481,000 in 1984; \$51,931,000 in 1985; \$26,683,000 in 1986; and \$26,918,000 in 1987.

The finance subsidiaries are engaged in the business of financing the purchases of products of the Corporation and its subsidiaries and, in the case of UT Credit, products of other companies incorporating United Technologies' products. The subsidiaries provide financing through acquisition of accounts and notes receivable, leases and interests therein. Equipment financed for customers includes, principally, Pratt & Whitney Aircraft-powered commercial aircraft, Carrier products and Sikorsky helicopters. UT Credit also purchases, on a discounted basis from the Corporation, unsecured special short-term receivables from airframe manufacturers with maturities of up to six months. At December 31, 1982, the amount of such special short-term receivables was approximately \$188,797,000, and the average investment in these receivables was \$180,561,000 in 1982.

In the first quarter of 1982, and effective January 1, 1982, the finance companies changed their method of accounting for investment tax credits from the deferral method to the flow-through method, consistent with the accounting change made by the Corporation. The effect of the change in 1982 was to increase net income by \$5,981,000, of which \$3,543,000 represents the cumulative effect of prior years' investment tax credits and \$2,438,000 represents the net effect of 1982 investment tax credits.

Operating agreements with the finance subsidiaries provide that income maintenance payments will be made to the subsidiaries to the extent necessary so that the subsidiaries' earnings available for fixed charges shall not be less than one and one-half times such fixed charges. In addition, the operating agreement between the Corporation and UT Credit provides for the purchase by the Corporation of receivables in the event of default by the obligor and for the purchase of equipment held for lease under operating leases in the event that UT Credit is unable to lease such equipment on reasonable terms, if such receivables and equipment relate to products of the Corporation or products of others incorporating products of the Corporation. At December 31, 1982, \$479,105,000 of the accounts and notes receivable and leases included in the combined, condensed financial data of the finance subsidiaries were subject to such purchase terms.

As of December 31, 1982, the finance subsidiaries had outstanding commitments for financing of approximately \$750,000,000. Of this amount, \$236,000,000 is expected to be disbursed in 1983, \$22,000,000 in 1984 and \$492,000,000 in 1984 and later years. A major portion of the commitments relate t aircraft engine financing, much of it subject to future aircraft orders to be placed by the customers.

During the fourth quarter of 1982, UT Credit filed a shelf Registration Statement with the Securities and Exchange Commission covering \$300,000,000 of long-term debt securitie to be issued at such times as market conditions are considered favorable. In January 1983, UT Credit issued \$100 million of 10 year notes at an interest rate of 11½% under such Registration Statement. The proceeds were used principally to reduce short-term borrowings. The proceeds of the remaining \$200 million, if issued, will be used principally to reduce short-term borrowings and/or to meet financing commitments discussed above.

Real Estate Subsidiary:

In 1982, the Corporation formed an unconsolidated real estate subsidiary, which in December 1982 purchased an office building in Hartford, Connecticut. Approximately 20% of the office building is utilized as the headquarters of the Corporation. The subsidiary's principal asset is the office building, at a cost of \$51,000,000. Its liabilities consist principally of an 8\% mortgage of \$26,000,000 payable in installments to 1999 (which is without recourse to the Corporation), and a non-interest bearing intercompany account payable to the Corporation of \$25,000,000. The real estate subsidiary holds a 99 year lease on the land underlying the building, at an initial rental of \$1,000,000 per year, which is adjustable annually based on certain factors and within certain limitations. The subsidiary also has certain rights and obligations (which are guaranteed by the Corporation) concerning future purchase of the land.

There were no significant operations in the real estate subsidiary in 1982.

Note 9

<u>Deferred Charges</u>: Included in deferred charges are costs in excess of the net assets of acquired companies (goodwill), net of amortization as follows:

In Thousands of Dollars	1982	1981
Goodwill Accumulated amortization	\$627,593 (95,165)	\$635,025 (72,037)
	\$532,428	\$562,988

During 1982 and 1981, net reductions of \$7,432,000 and net additions of \$17,382,000, respectively, were recorded, representing business acquisitions and dispositions and net adjustments on completion of accounting studies to assign values to the net assets of acquired companies.

Note 10

<u>Short-Term Borrowings and Lines of Credit</u>: The following summarizes the short-term borrowings of the Corporation and its consolidated subsidiaries as of December 31, 1982 and 1981:

In Thousands of Dollars	1982	1981
Bank borrowings Commercial paper	\$217,371 232,020	\$117,890 274,872
	\$449,391	\$392,762

At December 31, 1982, the Corporation had credit commitments by banks totaling \$2,000,000,000. These comprised \$1.000,000,000 of formal lines of credit (available on an either/or basis to the Corporation or UT Credit, and up to \$500,000,000 is available to CDCC on an informal basis) and \$1,000,000,000 under a Revolving Credit Agreement (available on an either/or basis to the Corporation and UT Credit). The bank lines provide for short-term borrowings through March 1, 1984, at interest rates up to prime rates and for a fee of 1/1/18 per year. The Revolving Credit Agreement provides for borrowings through September 30, 1986, at interest rates up to 1/8% over the prime rate and for a commitment fee of up to 1/2% per year on undrawn amounts. At the end of 1982, \$20,800,000 of the above bank borrowings by the Corporation were outstanding under the formal bank lines. There were no borrowings under such lines by UT Credit or CDCC. The unused bank lines and the Revolving Credit Agreement serve as informal backup facilities for commercial paper.

Under informal arrangements, the Corporation maintains compensating demand deposits with banks which, although they fluctuate from time to time, generally range from \$50 to \$55 million.

Note 11

<u>Taxes on Income</u>: The provision for income taxes for each of the three years ended December 31, 1982 comprised the following:

In Thousands of Dollars	1982	1981	1980
Currently payable:			
United States			
Federal	\$ 78,344	\$149,891	\$ 13,479
State	50,740	30,457	14,881
Foreign	142,505	146,743	124,300
•	\$271,589	\$327,091	\$152,660
Deferred:			
United States			
Federal	\$ 59,025	\$ 38,697	\$179,274
State	(6,941)	16,274	14,639
Foreign	(5,429)	3,867	11,331
	\$ 46,655	\$ 58,838	\$205,244
Investment tax credit			
deferred, net	\$ —	\$ 16,762	\$ 15,940
	\$318,244	\$402,691	\$373,844

As discussed in Note 2, the Corporation adopted the flow-through method of accounting for investment tax credits effective January 1, 1982. The current tax provision for 1982 has been reduced by \$27,044,000 for the effect of investment tax credits generated in 1982.

Deferred income taxes represent the tax effects of transactions which are reported in different periods for financial and tax reporting purposes. Changes in deferred federal income taxes shown above, which represent the tax effects of transactions which are reported in different periods for financial and tax reporting purposes, include the income tax effects of:

In Thousands of Dollars	1982	1981	1980
Use of completed-contract method for reporting taxable income on long-term			
manufacturing contracts	\$ 18,903	\$(17,792)	\$167,677
Tax depreciation or accelerated cost recovery in excess of financial statement	\$ 10,500	\$\(17,192)	\$107, 0 77
depreciation	23,580	18,286	6,477
Capitalization of interest cost, less related	20,000	10,200	0,111
depreciation	14,873	17,286	12,346
Adjustments of assets and			
liabilities for tax purposes, which tend to			
recur annually:			
Adjustment of			
inventories to tax			
basis	(6,365)	221	5,736
Expenditures			
(provisions) for			
warranty and			
correction of product deficiencies, tax			
deductible when paid	2,747	6,818	6,550
Employee severance,	2,011	0,010	0,000
pension and vacation			
expense deductible on			
different bases for			
book and tax purposes	1,167	(2,948)	(2,585)
Customer allowances,			
tax deductible when paid or applied	974	25,663	(94.154
Other items	3,146	(8,837)	(24,154) 7,227
O DITEL TOURIS	\$ 59,025	\$ 38,697	\$179,274
		ক ৩০,০১৫	Ф113,214

The sources of income before income taxes for each of the three years ended December 31, 1982 were:

In Thousands of Dollars	1982	1981	1980
United States	\$502,981	\$535,374	\$470,336
Foreign	254,743	340,041	316,704
	\$757,724	\$875,415	\$787,040

Since 1972, federal income tax legislation has permitted indefinite postponement of currently payable income taxes on a portion of profits from export sales by the Corporation's export subsidiaries which are Domestic International Sales Corporations. The Corporation has reduced its income tax provisions to the extent that management believes that export earnings can continue to be reinvested in export-related assets and the taxes postponed, as provided by this legislation.

Deferred income taxes generally have not been provided on undistributed earnings of international subsidiaries and of Domestic International Sales Corporations, amounting to \$527,206,000, included in consolidated retained earnings at December 31, 1982.

Differences between effective income tax rates and the statutory U.S. federal income tax rates are as follows:

	1982	1981	1980
Statutory U.S. federal income tax	•	-	
rates	46.0%	46.0%	46.0%
State and local income taxes, net of			
federal tax benefit	3.1	2.9	2.0
Research and experimentation credit	(2.0)	(0.6)	_
Investment tax credit	(3.6)	` <u> </u>	
Amortization of investment tax credit	· - ·	(1.8)	(1.3)
Varying tax rates of consolidated			
subsidiaries (including DISC)	(4.2)	(3.1)	(2.3)
Foreign currency balance sheet			
translation adjustments, without			
tax effect	0.7	0.5	(0.5)
Amortization of excess purchase cost			
and other purchase accounting			
adjustments, without tax effect	2.5	2.1	1.9
Equity in earnings of unconsolidated			
subsidiaries	(1.1)	(0.5)	(0.3)
Other	0.6	0.5	2.0
Effective income tax rates	42.0%	46.0%	47.5%

Note 12Long-Term Debt: Long-term debt consists of the following:

In Thousands of Dollars	1982	1981
9%% Note due June 1, 1982	\$ -	\$ 50,000
11.10% Notes due January 10,		
1983-1985	100,000	100,000
9% Notes due April 15, 1985	100,000	100,000
9.45% Notes due January 15, 1989	100,000	100,000
9%% Sinking Fund Debentures due		
April 15, 2000	75,420	100,000
9%% Sinking Fund Debentures due		
January 15, 2004	66,600	200,000
111/8 Sinking Fund Debentures due	•	ŕ
November 15, 2012	100,000	_
Carrier 7¾% Debentures due 1998	39,991	41,626
United Technologies Finance	·	,
(Netherlands Antilles) N.V.:		
61/2% Swiss Franc Notes due		
September 28, 1987	37,407	_
12% Guaranteed Notes due	•	
Öctober 15, 1989	100,000	_
7%% Deutsche Mark Bearer	,	
Bonds due 1992	41,990	_
Other, average interest rate 9.0%,	,	
due 1983 to 2009	220,925	215,150
	\$982,333	\$906,776
Less - current portion	55,153	74,378
-	\$927,180	\$832,398

The Corporation has filed a Registration Statement with the Securities and Exchange Commission covering up to \$300,000,000 of long-term debt securities, to be issued at such times as market conditions are considered favorable. In November 1982, the Corporation issued \$100,000,000 of 11½% Sinking Fund Debentures due November 15, 2012 pursuant to that Registration Statement. It is intended that proceeds from the remaining \$200,000,000 of debt, if and when issued, will be applied principally to the reduction of short-term borrowings.

Required payments on long-term debt for the next five years are \$55,153,000 in 1983, \$60,869,000 in 1984, \$160,151,000 in 1985, \$32,127,000 in 1986, and \$62,619,000 in 1987.

Note 13Shareowners' Equity: Preferred Stock consists of the following:

In Thousands of Dollars	1982	1981
\$4.50 Cumulative Dividend		
Preferred Stock (Outstanding -		
19,994 and 20,141 shares,		
respectively) (Liquidating		
preference – \$105 per share,		
aggregating \$2,099,000)	\$ 1,999	\$ 2,014
\$2.55 Cumulative Dividend		
Convertible Preferred Stock		
(Outstanding $-20,695,238$ and		
22,395,030 shares, respectively)		
(Liquidating preference — \$25 per		
share, aggregating \$517,381,000)	521,009	557,592
\$3.875 Cumulative Dividend		
Convertible Preferred Stock		
(Outstanding $-3,499,562$ and		
3,813,490 shares, respectively)		
(Liquidating preference — \$50 per		
share, aggregating \$174,978,000)	164,816	179,614
\$8.00 Cumulative Dividend		
Convertible Preferred Stock		
(Outstanding $-115,477$ and		
139,352 shares, respectively)		
(Liquidating preference – \$100		
per share, aggregating \$11,548,000)	9,950	12,007
	\$697,774	\$751,227

The \$4.50 Preferred Stock is redeemable at the option of the Corporation at \$105.00 per share plus accrued and unpaid dividends. The \$2.55 Convertible Preferred Stock will be redeemable at the option of the Corporation on and after September 1, 1986, initially at \$29.00 per share, and thereafter at decreasing amounts to \$25.00 per share on September 1, 1994, plus accrued and unpaid dividends. Each share is convertible at the option of the holder at any time into .3928 shares of Common Stock. The \$3.875 Convertible Preferred Stock will be redeemable at the option of the Corporation on and after August 31, 1983, initially at \$52.50 per share, and thereafter at decreasing amounts to \$50.00 per share on August 31, 1988, plus accrued and unpaid dividends. Each share is convertible at the option of the holder at any time into 1.25 shares of Common Stock. The \$8.00 Preferred Stock will be redeemable at the option of the Corporation on and after April 1, 1984 at \$100.00 per share plus accrued and unpaid dividends. Each share is convertible at the option of the holder at any time into 4.44 shares of Common Stock.

In January 1982, the Corporation announced plans to reacquire up to \$100,000,000 of its Convertible Preferred Stock. During 1982, the Corporation reacquired 282,000 shares of the \$3.875 Preferred Stock and 1,825,100 shares of the \$2.55 Preferred Stock, for a total purchase of \$53,271,000. The shares of Preferred Stock reacquired would have been convertible into 1,058,956 shares of Common Stock, at the dates of purchase.

At December 31, 1982, 113,305 and 5,467,430 shares of Preferred Stock and Common Stock, respectively, were reserved for issuance under various employee incentive plans (Note 14). In addition, 180,917 shares of Preferred Stock were reserved for issuance on conversion of certain debentures of Carrier Corporation.

The terms of the indentures relating to certain issues of long-term debt include provisions intended to restrict, under certain conditions, the availability of retained earnings for payment of dividends on the Common Stock. At December 31, 1982, all of the Corporation's retained earnings were free of such restrictions.

At December 31, 1982, undistributed earnings of \$87,885,000 of the Corporation's unconsolidated finance subsidiaries were included in retained earnings.

Note 14

Employee Benefit Plans: The Corporation's general policy is to fund current pension costs as accrued. Pension costs were \$200,106,000 in 1982, \$199,892,000 in 1981 and \$210,423,000 in 1980. These amounts included amortization of prior service costs over periods ranging from 14 years for the principal plans to 30 years for certain of the subsidiaries' plans. Changes in 1982 and 1981 in the actuarial assumptions used to determine pension costs for several plans, together with increases in plan benefits, had the net effect of reducing pension costs by approximately \$25,726,000 and \$11,125,000, respectively. A comparison of accumulated plan benefits and plan net assets for the defined benefit plans of the Corporation and its subsidiaries, generally as of January 1, for 1982 and 1981 is shown below:

In Thousands of Dollars	1982	1981
Actuarial present value of accumulated plan benefits: Vested	\$ 1,972,099	\$1,984,951
Nonvested	139,499	126,771
	\$2,111,598	\$2,111,722
Net assets available for benefits	\$2,855,849	\$2,604,850

The assumed rates of return used in determining the actuarial present value of accumulated plan benefits, generally the rates published by the Pension Benefit Guaranty Corporation as of the dates of valuation, were $7\frac{1}{4}$ % and $7\frac{1}{4}$ %, on a weighted average basis, for 1982 and 1981, respectively. Pension plans of the Corporation's international subsidiaries generally do not determine the actuarial value of accumulated benefits and the value of net assets as calculated and shown above. For these plans, the actuarially computed value of vested benefits as of December 31, 1982 and 1981 exceeded the total of those plans' pension fund assets and balance sheet accruals by \$19,772,000 and \$26,325,000, respectively. Liabilities under unfunded pension plans of certain international subsidiaries and for employee severance benefits, including those accruing to employees under foreign government regulations, are included in other long-term liabilities in the accompanying balance sheet.

At December 31, 1982, 4,067,762 shares of Common Stock were reserved for issuance under the Corporation's 1974 and 1976 Stock Option Plans and 1979 Long Term Incentive Plan. Option prices under these Plans approximate 100% of the market price of the Common Stock on the dates the options are issued. Effective February 5, 1982, the Board of Directors, upon shareowners' approval, authorized the cancellation of outstanding options for 1,922,633 shares of Common Stock granted under the 1976 Stock Option Plan and the 1979 Long Term Incentive Plan in 1980 and 1981 at option prices averaging \$51.57, and their reissue at a price of \$35.875, which represented fair market value as of that date. The 1979 Plan provides for the granting of Stock Appreciation Rights linked with stock options granted under either the 1979 Plan or the 1976 Plan. The exercise of either a Stock Appreciation Right or a stock option automatically cancels the connected option or right.

The 1979 Plan also provides for the granting of Performance Units. The units are payable at the end of each award period, which may not exceed 5 years and then only if certain minimum performance targets are met. In certain instances, the exercise of either a stock option or a Performance Unit automatically cancels the related unit or option.

A summary of the transactions under all Plans for the three years ended December 31, 1982 is set forth on the following page.

	Stoc	Stock Appr Stock Options		opreciation Rights	Performance Units
	Shares	Average Price	Rights	Average Price	Units
Outstanding -			<u> </u>		
December 31, 1979	2,696,035	\$33.84	83,001	\$36.88	259 ,968
Granted	1,326,102	\$48.04	216,310	\$44.32	484 ,994
Exercised	(572,356)	\$31.44	(12,500)	\$36.88	(1,224)
Cancelled	(92,412)	\$38.59	(3,220)	\$36.88	(24,899)
Outstanding —			 -		 -
December 31, 1980	3,357,369	\$39.73	283,591	\$42.55	718,839
Granted	1,163,018	\$53.54	115,502	\$50.36	458,660
Exercised	(498,268)	\$34.40	(45,500)	\$40.77	_
Cancelled	(366,141)	\$44.30	(104,660)	\$42.66	(82,838)
Outstanding -			——		
December 31, 1981	3,655,978	\$44.39	248,933	\$46.46	1,094,661
Granted	1,294,677	\$35.94	219,568	\$35.88	472,634
Exercised	(422,135)	\$33.84	(40,588)	\$37.62	(220,614)
Cancelled	(2,259,423)	\$49.16	(22,783)	\$46.55	(62,829)
Reissued	1,798,665	\$35.88		· —	
Outstanding -					
December 31, 1982	4,067,762	\$36.37	405,130	\$41.60	1,283,852

At December 31, 1982, stock options for 840,242 shares of Common Stock were exercisable at an average price of \$34.72 per share. The number of options available for grant under all of the Plans at December 31, 1982 was 1,278,985 (2,136,703 at December 31, 1981).

During 1982, \$11,105,000 (\$10,851,000 in 1981 and \$12,979,000 in 1980) was charged to income for Stock Appreciation Rights and Performance Units which have been awarded under the 1979 Plan.

There were also outstanding options under prior Carrier plans for 109,680 shares of \$2.55 Preferred Stock at an average price of \$17.35. A total of 107,240 of these shares were exercisable at an average price of \$17.32. During the year options for 93,459 shares were exercised at an average price of \$16.56. In addition, there were outstanding options under prior plans of another acquired company for 3,625 shares of \$3.875 Preferred Stock at an average price of \$15.98. All of these shares were exercisable at an average price of \$15.98. During the year options for 2,000 shares were exercised at an average price of \$18.55.

The Corporation and a number of its subsidiaries have savings plans in which a portion of employee contributions is matched by the employer. The matching contributions totaled \$39,024,000 in 1982 (\$33,943,000 in 1981 and \$28,454,000 in 1980).

For 1982, \$30,358,000 (\$27,912,000 in 1981 and \$26,929,000 in 1980) was authorized under the Corporation's Incentive Compensation Plan for distribution among officers and employees designated by the Board of Directors. In addition,

\$2,734,000 was authorized for distribution in 1982 (\$8,253,000 in 1981 and \$9,621,000 in 1980) under plans of acquired companies.

Note 15

Commitments and Contingent Liabilities: The Corporation is engaged in various legal proceedings and, at December 31, 1982, was contingently liable in the amount of approximately \$38,000,000, representing discounted accounts and notes receivable, and participations in guarantees of aircraft financing arrangements. Management does not expect that amounts, if any, which may be required to be paid by reason of such litigation, discounted receivables or guarantees will be of material importance to the financial condition or earnings of the Corporation.

The Corporation extends performance and operating cost guarantees, which are beyond its normal warranty and service policies, for extended periods on some of its products, particularly commercial aircraft engines. Liability under such guarantees is contingent upon future product performance and durability. Management has no present reason to believe that such guarantees will result in material losses to the Corporation.

At December 31, 1982 the Corporation had commitments of \$174,847,000 on purchase orders issued for acquisition of fixed assets.

The Corporation and its subsidiaries occupy space and use certain equipment under lease arrangements. The Corporation is not a lessee under any capital leases of significance. Rent expense in 1982, 1981 and 1980 under such arrangements totaled \$202,530,000, \$177,799,000 and \$145,887,000, respectively. Rental commitments at December 31, 1982 under long-term noncancellable operating leases were as follows:

In Thousands of Dollars	Land, Buildings and Office Space	Machinery, Tools and Equipment
1983	\$ 59,637	\$ 68,488
1984	51,885	53,118
1985	44,035	33,906
1986	38,920	19,197
1987	34,406	14,423
After 1987	371,129	18,905
	\$600,012	\$208,037

Note 16

<u>Business Segment Financial Data</u>: Business segment information for the three years ended December 31, 1982, required by Financial Accounting Standard No. 14, appears in the Consolidated Summary of Business Segment Financial Data on pages 36 through 38.

Note 17

Changing Prices (Unaudited): The inflation data presented below for 1982 has been provided in accordance with Statement of Financial Accounting Standard No. 33, "Financial Reporting and Changing Prices," as amended by FAS No. 70, "Financial Reporting and Changing Prices: Foreign Currency Translation." The inflation data for 1981 also has been restated in accordance with the latter Standard. The inflation data for 1980 and prior years has been provided as required by FAS No. 33. The amounts are not necessarily indicative of results that might be experienced in future periods.

The following table summarizes adjustments to net income for 1982 required to be presented by FAS No. 33 as amended:

Net Income, Adjusted	for Changing	Prices
----------------------	--------------	--------

Tiet meane, majastea for emanging 1 mees	
In Thousands of Dollars	
Income before extraordinary item and cumulative effect of accounting change Adjustments for changes in specific prices: Cost of goods and services sold, excluding	\$ 427,000
depreciation Depreciation	(80,000) (43,000)
Adjusted for current cost	\$ 304,000
Gain from decline in purchasing power of net amounts owed	\$ 17,000
Foreign currency translation adjustment	\$(135,000)
Increase in current cost of inventories and fixed assets held during the year* Increase in general price level	\$ 205,000 192,000
Excess of increase in specific prices over increase in general price level	\$ 13,000

*At December 31, 1982, the current cost of inventories and net fixed assets was \$5,158 million and \$3,209 million, respectively.

The inflation adjustments to cost of goods and services sold and depreciation expense, and to net assets at year end as shown on page 35, have been derived by restating historical costs in terms of current costs. Under current costs, historical costs are restated to costs which are current at the balance sheet date or date of sale or use, generally by reference to current manufacturing costs and by application of specific price indices to historical costs. Current cost data is measured after foreign currency translation and based on the U.S. CPI(U) (the translate-restate method).

Certain fixed assets of the Corporation have been depreciated in the historical financial statements under accelerated methods, partially to allow for expected cost increases. To provide the most meaningful basis of adjustments, current cost depreciation has been determined on the straight-line method. Estimates of asset life and related salvage value are consistent with those used in the historical financial statements.

Because a major portion of the Corporation's business is conducted under long-term contracts with customers, selling prices established for product deliveries in future periods have generally reflected estimated costs to be incurred in those future periods. Accordingly, the principal portion of inventories and contracts in progress and cost of goods and services sold included in the Corporation's historical financial statements relating to items which were manufactured or acquired for sale under long-term contract arrangements have not been restated for the effects of changing prices.

As prescribed by FAS No. 33, no adjustments or allocations of the amount of historical income taxes have been made in determining net income adjusted for the effects of changing prices. Because corporate profits are taxed, under the U.S. Internal Revenue Code and in most other countries, on the basis of historical cost results without regard to the inflated cost of replacing corporate assets, the effective income tax rate is 50.1% on the current cost basis, compared to 42.0% on the historical cost basis. The result of current tax policies in an

inflationary economy is to reduce the funds which would otherwise be available to businesses for replacing, modernizing and expanding capital facilities.

The following five-year summary reflects the adjustments to the 1982 data described above and similar adjustments for 1981, 1980 and 1979. In addition, sales and certain per share data for the year 1978 have been restated to average 1982 dollars. Other data for 1978 is not required by FAS No. 33 to be restated.

Five-Year Summary of Selected Financial Data Adjusted for the Effect of Changing Prices (Unaudited)

In Thousands of Dollars (except per share amount	1982	1981	1980	1979 Pro Forma+	1979	1978
Sales*	\$13,577,000	\$14,511,000	\$14,441,000	\$14,104,000	\$12,044,000	\$9,273,000
Current Cost Data:						
Income before extraordinary item and cumulative effect of						
accounting change	\$ 304,000	\$ 363,000	\$ 324,000	\$ 314,000	\$ 305,000	
Per Share of Common Stock:						
Primary earnings	\$4.41	\$5.69	\$5.34	\$4.88	\$5.56	
Fully diluted earnings	\$4.29	\$ 5.37	\$4.98	\$4.65	\$5.11	
Net Assets at Year End	\$ 4,421,000	\$ 4,540,000	\$ 4,339,000		\$ 4,453,000	
ncrease in Current Costs			,			
greater than (less than)						
increase in General Prices	\$ 13,000	\$ (49,000)	\$ (204,000)		\$ (107,000)	
Gain from Decline in Purchasing						
Power of Net Amounts Owed	\$ 17,000	\$ 48,000	\$ 50,000		\$ 18,000	
Foreign Currency Translation						
Adjustment	\$ (135,000)	\$ (75,000)	-		_	
Cash Dividends per Common Share*	\$2.40	\$2.55	\$2.58		\$2.93	\$2.96
Market Price per Common Share at	•	·			·	•
Year End*	56 %	$44\frac{3}{8}$	711/2		$57\frac{1}{8}$	57%
Average U.S. Consumer Price Index	289.Ž**	272. 4	246.8		217.4	195.4

^{*} As reported for 1982. Except for the 1982 current cost data, all other data in this table have been restated in terms of average 1982 dollars based on general price indices.

The foregoing supplementary information, prepared in accordance with FAS No. 33, as amended by FAS No. 70 for 1982 and 1981, is viewed as experimental by the Financial Accounting Standards Board. It involves the use of assumptions and estimates and, therefore, should be viewed in that context and not necessarily as a reliable indicator of the effect of inflation on the Corporation's results of operations or its financial position.

^{**} Estimated

⁺ Pro forma as if Carrier and Mostek had been wholly-owned subsidiaries on January 1, 1979.

United Technologies Corporation

Consolidated Summary of Business Segment Financial Data

Industry Segments

Tears Ended December o.	Years	Ended	December	• 31.
-------------------------	-------	-------	----------	-------

In Thousands of Dollars	1982	1981	1980
Revenues			
Power	\$ 5,271,606	\$ 5,566,682	\$ 4,861,590
Flight Systems	1,996,776	1,656,749	1,362,833
Building Systems	3,683,830	3,741,626	3,375,331
Industrial Products for the Automotive,	• •	, ,	, ,
Electronics and Other Industries	2,524,942	2,587,562	2,615,629
Other	307,759	291,679	292,414
Eliminations	(207,784)	(176,540)	(183,803
Consolidated revenue	\$13,577,129	\$13,667,758	\$12,323,994
Operating Profit	······································		
Power	\$ 420,351	\$ 596,437	\$ 356,365
Flight Systems	169,256	105,465	73,553
Building Systems	257,114	285,230	305,650
Industrial Products for the Automotive,			
Electronics and Other Industries	34,450	34,463	21 6,704
Other	7,465	12,074	5,005
Eliminations	(3,759)	2,915	(3,529
Operating profit	884,877	1,036,584	953,748
Other income, less other deductions	139,000	96,839	75,397
Interest expense	(250,886)	(244,839)	(229,848
General corporate expenses	(15,267)	(13,169)	(12,257)
Consolidated income before income taxes	\$ 757,724	\$ 875,415	\$ 787,040
Identifiable Assets			
Power	\$ 2,700,740	\$ 2,759,899	\$ 2,450,962
Flight Systems	953,971	822,781	655,49(
Building Systems	1,787,050	1,626,007	1,829,20€
Industrial Products for the Automotive,			
Electronics and Other Industries	2,032,147	1,956,802	1,977,42
General corporate assets, and other	519,468	389,614	422,93
Consolidated assets	\$ 7,993,376	\$ 7,555,103	\$ 7,336,010
Capital Expenditures			
Power	\$ 189,734	\$ 245,854	\$ 212,61
Flight Systems	69,994	49,031	50,82
Building Systems	89,581	96,102	78,03
Industrial Products for the Automotive,			
Electronics and Other Industries	156,007	176,027	210,50
General corporate assets, and other	23,037	24,178	17,10
Consolidated additions to fixed assets	\$ 528,353	\$ 591,192	\$ 569,08

Consolidated Summary of Business Segment Financial Data continued

Geographic Areas

Years	Ended	December	31,

1982	1981	1980			
\$11,007,974	\$10,975,653	\$ 9,872,710			
	•				
1,437,496	1,379,298	1,484,679			
1,487,633	1,676,105	1,463,464			
(355,974)	(363,298)	(496,859)			
\$13,577,129	\$13,667,758	\$12,323,994			
\$ 605,365	\$ 669,064	\$ 630,131			
123,118	116,194	135,161			
155,353	247,265	190,244			
1,041	4,061	(1,788)			
884,877	1,036,584	953,748			
139,000	96,839	75,397			
(250,886)	(244,839)	(229,848)			
(15,267)	(13,169)	(12,257)			
\$ 757,724	\$ 875,415	\$ 787,040			
\$ 5,641,215	\$ 5,371,182	\$ 5,376,612			
1,049,721	954,198	971,531			
1,154,153	1,080,566	967,678			
148,287	149,157	20,195			
\$ 7,993,376	\$ 7,555,103	\$ 7,336,016			
	\$11,007,974 1,437,496 1,487,633 (355,974) \$13,577,129 \$605,365 123,118 155,353 1,041 884,877 139,000 (250,886) (15,267) \$757,724 \$5,641,215 1,049,721 1,154,153 148,287	\$11,007,974 \$10,975,653 1,437,496 1,379,298 1,487,633 1,676,105 (355,974) (363,298) \$13,577,129 \$13,667,758 \$605,365 \$669,064 123,118 116,194 155,353 247,265 1,041 4,061 884,877 1,036,584 139,000 96,839 (250,886) (244,839) (15,267) (13,169) \$757,724 \$875,415 \$5,641,215 \$5,371,182 1,049,721 954,198 1,154,153 1,080,566 148,287 149,157			

See accompanying Notes to Consolidated Summary of Business Segment Financial Data

Notes to Consolidated Summary of Business Segment Financial Data

(A) The Corporation and its consolidated subsidiaries design, develop, manufacture and sell high-technology products, classified in four principal industry segments or lines of business in accordance with Financial Accounting Standard No. 14. For reporting purposes, certain changes were made in these industry segments in 1981, principally to reflect changes in the Corporation's product marketing strategies and structure. Comparative data for 1980 has been reclassified accordingly.

Power products are principally aircraft engines and substantial spare parts. Energy process equipment and modified aircraft engines and related equipment for electrical power generation and other applications are also included.

Flight Systems products include helicopters, propellers, rocket motors, and fuel control, environmental, radar, cockpit and integrated display and other airborne and space systems.

Building Systems products include air-conditioning equipment, elevators and escalators, substantial service, maintenance and spare parts, and building management systems.

Industrial Products for the Automotive, Electronics and Other Industries include electrical wiring systems, electromechanical and hydraulic devices, paint, fuel injection systems, electric motors, and other products for the automotive industry; controls and control systems for the appliance and related industries; magnet wire and winding machinery for the electric motor, transformer and electromagnetic equipment industries; semiconductor memory devices for the electronics industry; ink and other chemical specialty products for the printing and other industries; and a variety of wire and cable products.

Activities classified as "Other" consist of a variety of business activities, including the design and manufacture of naval radar, military command and control and computer systems, and radioactivity measurement and gas chromotography instruments.

(B) Revenue by industry segment, and geographic area, includes intersegment sales and transfers between geographic areas. Generally, such sales and transfers are made at prices normally approximating those which the selling or transferring entity is able to obtain on sales of similar products to unaffiliated customers. Certain domestic transfers are, however, made at inventory cost. These are principally transfers of wire products within the Industrial Products classification.

Revenues include sales under prime contracts and subcontracts to the U.S. Government, for the most part Power and Flight Systems products, as follows:

In Thousands of Dollars	1982	1981	1980
Power	\$2,786,509	\$2,542,238	\$1,833,931
Flight Systems	\$1,544,240	\$1,122,658	\$ 791,046

Revenues from United States operations include export sales of \$2,271,721,000 in 1982, \$2,636,437,000 in 1981 and \$2,142,593,000 in 1980. Export sales to Europe were \$539,306,000, \$706,060,000 and \$648,002,000 of the 1982, 1981 and 1980 amounts, respectively. Export sales include direct sales to commercial customers outside the United States and sales to the U.S. Government, commercial and affiliated customers which are known to be for resale to customers outside the United States.

- (C) Operating profit is total revenue less operating expenses. In determining operating profit, none of the following have been included or deducted: other income, less other deductions; general corporate expenses; interest expense; and income taxes.
- (D) Identifiable assets are those which are specifically identified with the industry segments and geographic areas in which operations are conducted. General corporate assets consist principally of cash and short-term cash investments, investments in unconsolidated finance subsidiaries and other companies, and future income tax benefits.

Depreciation charges are as follows:

In Thousands of Dollars	1982	1981	1980
Power	\$130,716	\$105,829	\$80,590
Flight Systems	\$ 38,165	\$ 31,659	\$26,563
Building Systems	\$ 55,399	\$ 55,076	\$50,795
Industrial Products	\$ 87,964	\$ 72,790	\$ 57,985

- (E) Eliminations made in reconciling industry and geographic area data with the related consolidated amounts include intersegment sales and transfers between geographic areas, unrealized profits in inventory and similar items.
- (F) The Summary of Business Segment Financial Data should be read in conjunction with the other financial statements of the Corporation and notes thereto appearing elsewhere in this Annual Report.

Directors

Board of Directors

Robert J. Carlson Executive Vice President – Power

Antonia H. Chayes Partner, Csaplar and Bok (Law Firm)

Robert F. Dee Chairman of the Board SmithKline Beckman Corporation (Pharmaceuticals)

Charles W. Duncan, Jr.
President, Warren-King Companies
(Private Investments)

Hubert Faure Executive Vice President — Building Systems

T. Mitchell Ford Chairman, President and Director, Emhart Corporation (Diversified Manufacturer)

Harry J. Gray Chairman, President and Chief Executive Officer

Pehr G. Gyllenhammar Managing Director and Chief *xecutive Officer, AB Volco *Automobiles, Trucks, Buses)

Robert H. Malott Chairman of the Board and Chief Executive Officer, FMC Corporation (Machinery and Chemicals)

Walter F. Probst President Debliebe, Inc. (Private Investments) Peter L. Scott

Executive Vice President –
Electronics

William E. Simon Chairman Wesray Corporation (Private Investments)

Darwin E. Smith Chairman of the Board and Chief Executive Officer Kimberly-Clark Corporation (Consumer Paper Products)

Richard S. Smith Vice Chairman and Director National Steel Corporation (Metal Products)

William I. Spencer Retired President and Director Citicorp and Citibank, N.A. (Financial Institution)

Robert L. Sproull President University of Rochester

Jacqueline G. Wexler President National Conference of Christians and Jews

Committees

Executive Committee Harry J. Gray, Chairman T. Mitchell Ford Walter F. Probst William I. Spencer

Audit Review Committee Richard S. Smith, Chairman Antonia H. Chayes Charles W. Duncan, Jr. Pehr G. Gyllenhammar Darwin E. Smith Jacqueline G. Wexler

Compensation and Organization T. Mitchell Ford, Chairman Robert F. Dee Darwin E. Smith Robert L. Sproull Jacqueline G. Wexler

Committee on

Nominating Committee
William I. Spencer, Chairman
T. Mitchell Ford
Harry J. Gray
Robert H. Malott
William E. Simon

Pension Committee
Robert L. Sproull, Chairman
Robert F. Dee
Harry J. Gray
William E. Simon
Richard S. Smith
William I. Spencer

Public Issues Review
Committee
Jacqueline G. Wexler, Chairman
Antonia H. Chayes
Robert H. Malott
Walter F. Probst
William E. Simon
Darwin E. Smith
Robert L. Sproull

Operating and Policy
Committee
Harry J. Gray, Chairman
Stillman B. Brown
Robert J. Carlson
Raymond D'Argenio
Hubert Faure
Edward W. Large
James F. Lyons
Clark MacGregor
Sidney F. McKenna
Russell G. Meyerand, Jr.
Peter L. Scott

Officers

Management

Harry J. Gray Chairman, President and Chief Executive Officer

Robert J. Carlson

Executive Vice President – Power

Peter L. Scott Executive Vice President — Electronics

Hubert Faure
Executive Vice President — Building
Systems

Stillman B. Brown
Executive Vice President – Finance
and Administration

Edward W. Large Executive Vice President — Legal and Corporate Affairs

Raymond D'Argenio Senior Vice President – Communications

Clark MacGregor Senior Vice President — External Affairs

Sidney F. McKenna Senior Vice President – Human Resources and Organization

Nathaniel B. Morse Senior Vice President – Industrial Relations Policy Planning

Francis L. Murphy Senior Vice President and Counsel to the Chairman

Richard F. Gamble Group Vice President – Controls Group President, Hamilton Standard Division

James A. O'Connor Group Vice President — Essex Group President and Chief Executive Officer, Essex

Edward J. Rapetti Group Vice President – Automotive Group; President and Chief Executive Officer, Ambac

Joseph A. Biernat Vice President – Treasurer

J. Thomas Bouchard Vice President – Industrial Relations

Richard J. Coar Vice President; President, Pratt & Whitney Group

Robert F. Daniell Vice President; President and Chief Executive Officer, Sikorsky Aircraft William J. Evans Vice President

Edward M. Irving Vice President: President and Chief Executive Officer, Inmont

Beverly C. Lannquist Vice President – Investor Relations

Martin R. Lewis, Jr. Vice President and Secretary

James F. Lyons Vice President – Strategic Planning

Russell G. Meyerand, Jr. Vice President – Technology

Donald Nigro
Vice President - Manufacturing

Charles B. Preston Vice President - Controller

Dale W. Van Winkle Vice President

Ralph A. Weller Vice President

Hugh E. Witt Vice President – Government Liaison

Irving B. Yoskowitz
Vice President and General Counsel

Barnet R. Adelman Vice President – Power Sector

Bill L. Aishman General Manager, Pacific Area Operations, Otis

Robert F. Allen
President and Chief Executive
Officer, Carrier

Anthony D. Autorino President, United Technologies Building Systems Company

Lawrence W. Clarkson President, Commercial Products Division of Pratt & Whitney Group

George A. L. David President, North American Operations, Otis

Harold L. Ergott, Jr.
President and Chief Executive
Officer, Mostek

Francisco Ramos Fernandez General Manager, Latin American Operations, Otis

Francois Jaulin President and Chief Operating Officer, Otis

Frank W. McAbee, Jr. President, Government Products Division of Pratt & Whitney Group

Eugene V. McAuliffe President, United Technologies (Europe)

T. Stephen Melvin President, Manufacturing Division of Pratt & Whitney Group

Irwin Mendelsen
Executive Vice President,
Commercial Engineering of Pratt &
Whitney Group

Herman A. Michelson President, Norden Systems

William C. Missimer Executive Vice President, Pratt & Whitney Group William L. Sammons President, North American Operations, Carrier

Elvie L. Smith
President and Chief Executive
Officer, Pratt & Whitney Canada,
Inc.

Terry D. Stinson President, Elliott

Jean-Pierre van Rooy President, Carrier International

Arthur E. Wegner Executive Vice President, Pratt & Whitney Group

William A. Wilson President, European and Transcontinental Operations, Otis



Transfer Agent

For the Common Stock

Citibank, N.A. 111 Wall Street New York, New York 10043

Transfer Agent

For the \$8 Preferred Stock

The Chase Manhattan Bank, N.A.

1 New York Plaza New York, New York 10081

Transfer Agent For the \$3.875 Preferred Stock

Chemical Bank 55 Water Street New York, New York 10041

Transfer Agent

For the \$2.55 and \$4.50 Preferred Stock

Morgan Guaranty
"rust Company of New York
"West Broadway
New York, New York 10015

Registrar

For the Common Stock

The Bank of New York 48 Wall Street New York, New York 10015

Registrar

For the Preferred Stock

Manufacturers Hanover Trust Company 40 Wall Street New York, New York 10015

Stock Listing

Common
New York, London, Paris,
Frankfurt, Geneva, Lausanne,
Basle, Zurich, Brussels and
Amsterdam Stock Exchanges
\$8 Preferred
New York Stock Exchange
\$3.875 Preferred
New York Stock Exchange
\$2.55 Preferred
New York Stock Exchange

Ticker Symbol

Common UTX \$8 Preferred UTX pr A \$3.875 Preferred UTX pr C \$2.55 Preferred UTX pr D

Newspaper Stock Listing

Common UnTech \$8 Preferred UTch pf 8 \$3.875 Preferred UTch pf 3.87 \$2.55 Preferred UTch pf 2.55

Corporate Office

United Technologies Building Hartford, CT 06101 Telephone (203) 728-7000

This annual report is sent to shareowners in advance of the proxy statement for the annual meeting to be held at 10 a.m., April 18, 1983, in Colorado Springs, Colorado. The proxy statement will be sent to holders of preferred and common stock on or about March 4, 1983, at which time proxies for the meeting will be requested.

Shareowners may obtain a copy of the 1982 United Technologies 10-K report filed with the Securities and **Exchange Commission** by writing to Martin R. Lewis, Jr., vice president and secretary, United Technologies Corporation, United Technologies Building, Hartford, Connecticut 06101. Shareowners may obtain a list of United Technologies' charitable contributions for 1982 by writing to Mr. Lewis at the above address.

Power

Pratt & Whitney Elliott Power Systems International Support Systems

Building Systems

Otis Elevator Carrier Air Conditioning Building Systems Company

Electronics

Mostek Essex Automotive Hamilton Standard Norden Systems Microelectronics Center

Sikorsky

Inmont

Research Center



minator of all we do.



Originals in color.



Contents

Page 1 Highlights

- 2 Company Description
- 3 Sales by Organizational Unit
- 5 Report from the Chairman
- 7 Review of 1983
- 13 Financial Review
- 16 Five-Year Summary
- 18 Management's Discussion and Analysis of Results of Operations and Financial Position
- 21 Comparative Stock Data
- 22 Management's Responsibility for Financial Statements
- 22 Report of Independent Accountants
- 23 Consolidated Financial Statements
- 28 Notes to Financial Statements
- 39 Consolidated Summary of Business Segment Financial Data
- 42 Selected Quarterly Financial Data
- 43 Board of Directors and Committees
- 44 Management

Cover

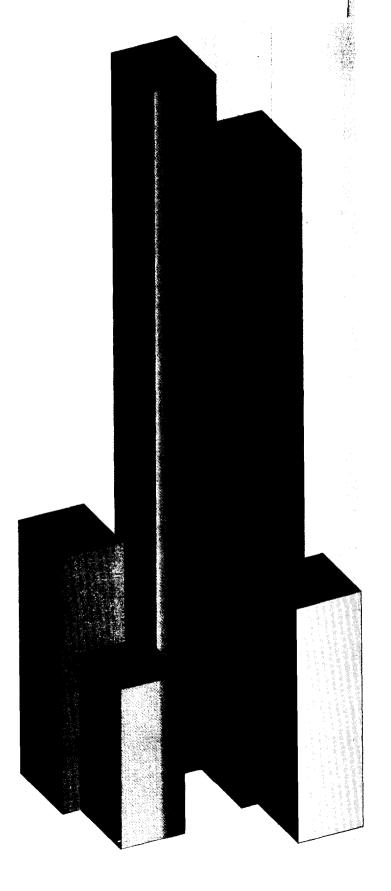
The cover map symbolizes United Technologies' commitment to global growth. Already over 36% of the corporation's revenues come from overseas markets, and United Technologies expects these to expand further during the remainder of the 1980s.

Highlights

Our Performance in Brief	1009	1000
	1983	1982
Sales	\$14.67 billion	\$13.58 billion
Income before extraordinary item		
and cumulative effect of	A 700 III	ф 10 П 1111
change in accounting principle	\$ 509 million \$ 509 million	\$ 427 million
Net income	\$ 509 million	\$ 534 million
Earnings per share:		
Income before extraordinary item and cumulative effect of		
change in accounting principle:		
Primary	\$ 7.94	\$ 6.73
Fully diluted	\$ 7.48	\$ 6.41
•	Ψ 1.10	Ψ 0.11
Net income:	A = 0.4	A 0 7 /
Primary	\$ 7.94	\$ 8.74
Fully diluted	\$ 7.48	\$ 8.01
Dividends per common share	\$ 2.55	\$ 2.40
Year-end business backlog	12.10 billion	\$11.70 billion
Research and development	\$ 971 million	\$ 834 million
Capital expenditures	\$ 675 million	\$ 528 million
Significant Balance Sheet Items	Decembe	r 31,
In millions	1983	1982
Assets		
Current assets	\$5,019	\$4,604
Fixed assets — net	2,688	2,386
Other	1,013	1,003
Liabilities	A 0.0 = 0	40.070
Current liabilities	\$3,373	\$3,050
Long-term debt	869	927
Other	694	534
Shareowners' equity	\$3,784	\$3,482

nited Technologies is a broad-based designer and manufacturer of high-technology products with global headquarters in Hartford, Connecticut. The corporation employs close to 194,000 people, operates about 300 plants, and maintains sales and service offices in about 50 countries around the world. United Technologies is among the 50 largest industrial companies in the world, the seventh largest manufacturer in the United States, and the third largest defense contractor in the United States. Sales are balanced among four attractive industries: aerospace, building systems, electronics, and automotive. The corporation's best-known products are Pratt & Whitney aircraft engines, Sikorsky helicopters, Norden defense systems, Carrier air conditioning systems, Otis elevators, Hamilton Standard controls, Essex wire and cable, Inmont specialty chemicals, and Mostek semiconductor products and systems.

Originals in color.



Sales by Organizational Unit

Power \$5.1 billion	35%
Pratt & Whitney Elliott Fuel Cell Operations International Support Systems	
Building Systems \$4.9 billion	33%
Carrier Air Conditioning Otis Elevator Essex Building Systems Company	
Defense \$1.9 billion	13%
Sikorsky Norden Systems	
Industrial \$1.8 billion	12%
Inmont Automotive	
Controls/Mostek \$1.2 billion	8%
Hamilton Standard Mostek	
Eliminations (\$0.2) billion	(1%)
Total	100%



Dear Shareowner

nited Technologies posted strong results in 1983. Net income from operations advanced 19% on a sales gain of 8% over 1982. This excellent performance, in the face of lower aircraft engine shipments and unfavorable foreign exchange rates, attests to the stability and balance we have achieved through diversification over the past decade.

Recovery in the automotive, semiconductor, and air conditioning markets paced our progress in 1983. In addition, we benefited from a healthy military business. 1983 was indeed a year of achievement. We set new goals, won important contracts, launched new products, and named a new president, Robert J. Carlson, as well as a new senior executive vice president, Hubert Faure. The corporation's operations were realigned according to the global markets they serve — Power, Defense, Industrial, Controls, and Mostek reporting to Mr. Carlson, and Building Systems reporting to Mr. Faure.

United Technologies' outlook for the coming year is good. Reduced military business will make earnings improvement difficult at Pratt & Whitney. Most of our North American commercial and industrial businesses, however, should benefit from the continued domestic economic recovery that is anticipated in 1984. Sales to the United States and foreign governments of helicopters, electronic systems, and other military equipment also look promising.

Management Objectives

Management's goal has been to make United Technologies a balanced, multi-industry company, aggressive in pursuing and creating opportunities. We are focusing on a few large and growing global markets, and on being a leader in those markets. Today, United Technologies is a leading participant in four attractive industries: aerospace, building systems, electronics, and automotive.

Our products are designed to have a clear competitive advantage and the lowest manufacturing cost. To support this aim, we plan to increase our capital expenditures from the \$674.8 million spent in 1983. Most of these outlays will be for new equipment and manufacturing processes to

improve productivity, not to increase capacity. By improving productivity, cutting costs, and achieving selected vertical integration, we should improve our cost base. We are expanding selectively into new businesses that build on our capabilities in high technology, increasing our application of microelectronics technology to product development, and expanding our presence around the globe.

Military and Commercial Prospects

We are the third largest defense contractor in the United States. Pratt & Whitney, Sikorsky, Norden Systems, and Hamilton Standard all hold leading positions in their military businesses.

In the commercial arena, 1983 saw improvement in the automotive, semiconductor, and air conditioning markets. This momentum — as well as improvement in wire and cable — is expected to continue in 1984. Recovery in the commercial aerospace industry, anticipated to begin moderately in 1985, should benefit Pratt & Whitney and Hamilton Standard. And prospects for continued growth appear good for Otis and Carrier and for our Building Systems Company's unique package of equipment, electronic systems, and telecommunications services for new or modernized commercial buildings.

Research and Development Paying Off

We are maintaining our historic commitment to research and development in order to develop technologically superior products at low manufacturing costs. We expect to invest \$1 billion or more of company funds in R&D annually through the remainder of the decade.

An important example of research-fueled growth is Pratt & Whitney. Already the commercial market leader, it is the only manufacturer in the large jet engine industry involved in the development of three totally new third-generation jet engines covering the entire commercial market. And we believe our new family of small turboprop engines has the potential of boosting Pratt & Whitney Canada's leading share of the commuter and executive turboprop aircraft market even higher.

Another example of research paying off is Otis. As the world's leading elevator builder, Otis is maintaining its market share as a result of its microprocessor-controlled Elevonic 401 for high-rise buildings and new competitive entries in the geared and hydraulic elevator segments.

Applying electronics technology to our current markets and to the opening up of new markets is a key element of our growth strategy. Microelectronics technology yields increased capability and productivity. That is why we are determined to continue to apply a digital approach right across our product line — from the electronic controls for Carrier air conditioners and Pratt & Whitney jet engines, to microprocessors that improve the efficiency of drawing

Harry J. Gray, chairman and chief executive officer (right), and Robert J. Carlson, president. copper wire at Essex, or control the mixing of colors for automotive paints at Inmont.

At our Building Systems Company, electronics is giving rise to "intelligent" buildings through the integration of hardware, sensors, and software to make buildings function more efficiently.

Global Growth

We are establishing United Technologies as a global enterprise and continuing to enlarge our role in world business. We have improved our geographic balance and participation in the world's most rapidly growing economies. Now we must not only adapt our product and selling strategies to markets and customers that are becoming worldwide, but also purchase our materials and manufacture our products around the globe to achieve low cost and efficient operation.

During the rest of the 1980s, our international operations are anticipated to grow at a faster pace than those in the United States as a result of internal expansion, new joint ventures, and selective acquisitions. In 1983, we formed a European Advisory Council, composed of outstanding European business executives, to help shape policies and practices for the development of business opportunities in Europe. We plan to expand this activity to include other economically important areas such as the Far East and Latin America.

Ready for 1984 and Beyond

Our challenge for the remainder of the decade is to take full advantage of the potential of our businesses. Because we are in the right markets with the right products, United Technologies is positioned to move forward around the world in 1984 and beyond.

Harry J. Gray

Chairman and Chief Executive Officer

Robert J. Carlson

President

Review of Operations

Power

nited Technologies' 1983 net income from operations rose 19% to a record high of \$509.2 million. Sales reached \$14.7 billion, also the highest in the corporation's history. Net income for 1982 was \$426.9 million, excluding two extraordinary, non-recurring items of about \$106.8 million. The turnaround of the United States economy, a growing defense business, and market share improvements in 1983 more than offset a decline in jet engine shipments and unfavorable foreign exchange rates.

Sales generated from commercial and industrial businesses totaled \$9.9 billion, up 9% over 1982. Government-related revenues advanced 7% to \$4.8 billion, representing 33% of total volume. The year-end backlog stood at \$12.1 billion.

Gross profit margins for the total year in 1983 averaged about the same as 1982, although improving steadily throughout the year. United Technologies' investment in research and development in 1983 rose at a faster rate than sales, reaching \$970.8 million. However, a decline in selling and administrative costs as a percentage of sales, lower interest expenses, higher other income, and a slightly lower effective income tax rate all contributed to a higher net income from operations.

Primary earnings per share for 1983 were \$7.94, based on the 55,717,000 average number of common shares outstanding for 1983. For 1982, primary earnings per share were \$6.73, excluding \$2.01 from the two extraordinary gains, based on the 53,105,000 average number of common shares then outstanding.

Fully diluted earnings per share were \$7.48, based on the 68,101,000 average number of fully diluted shares during 1983. For 1982, fully diluted earnings per share were \$6.41, excluding \$1.60 from the two non-recurring items.

The corporation in 1983 redeemed its \$3.875 convertible preferred and has announced it will redeem the \$8.00 convertible preferred on April 2, 1984. Also in 1983, the board of directors increased the quarterly dividend on the common stock from 60 to 65 cents a share.

The depressed condition of the commercial airline, general aviation, and turbomachinery markets continued to affect Power's results in 1983. Overall, sales declined slightly to \$5.1 billion. Profits dropped in 1983 as a result of lower unit volume, higher research and development spending, and a shift in sales volume from mature engines to those under continuing development.

CONTROL OF THE PROPERTY OF THE

Government Products Division

Military engine and spare parts revenues dipped 3% to \$2.5 billion in 1983. Increased parts sales failed to fully offset a decline in engine shipments. Pratt & Whitney's development work accelerated on new military programs.

New Military Engines Progress

Development of two new engines derived from the F100 — the PW1128 and PW1120 — continued in 1983. The higher-thrust PW1128 won further government funding and has been performing well in its test flights on the F-15 fighter. Development of the PW1120 for new foreign aircraft continued on schedule. Pratt & Whitney has proposed to re-engine the F-4 fighter with the PW1120, which substantially upgrades its flight performance. Pratt & Whitney's proposal is under study by the U.S. Air Force.

Pratt & Whitney's proposed PW5000 engine won one of two \$203 million contracts awarded as the next phase of the 50-month Joint Advanced Fighter Engine competition. Pratt & Whitney will produce a demonstrator engine by 1988 for the Air Force to consider for its new Advanced Tactical Fighter proposed for service in the 1990s.

The company's PW3005, a joint effort between the Government Products Division and Pratt & Whitney Canad

was selected for funding in another competitive development program. It is being designed to power a new military tilt-rotor aircraft (JVX) as well as to re-engine existing fuel-inefficient military aircraft.

Late in 1983, Pratt & Whitney signed an agreement with McDonnell Douglas for the PW2037 commercial engine to power the four-engine C-17 military transport.

Commercial Engine Leadership

Pratt & Whitney's share of commercial engine orders for widebody aircraft increased in 1983. The advanced Dash 7R4 version of the JT9D increased its position against competition and was specified in major orders from Singapore Airlines, Japan Air Lines, and Qantas of Australia. The JT8D remained No. 1 on standard-body aircraft, with important selections by British Airways, American Airlines, and Texas Air. Two key wins for the PW2037 were at Northwest and Singapore Airlines. Overall, Pratt & Whitney won 77% of the commercial engines ordered in 1983.

Pratt & Whitney is the only manufacturer in the industry with three new engine programs covering the entire thrust range for commercial airline transports. The PW2037, embodying new standards of fuel efficiency, received FAA certification in December. Production shipments are scheduled to begin in 1984. The PW4000 is our next-generation engine for widebody aircraft. Pratt & Whitney has completed the design and set stiff manufacturing cost targets for the PW4000. Several of its component tests already have been run successfully. The engine is scheduled to be available in 1986.

In October, 1983, Pratt & Whitney received United States Justice Department clearance to take a leading participation in International Aero Engines AG, a fivenation consortium venture. The venture will develop and produce the V2500 as a powerplant for proposed new 150-passenger aircraft, as well as advanced versions of existing standard-body planes. The V2500 is scheduled to be ready for the world's airlines in 1988.

Commercial Engine Sales Up

Sales of commercial engines and spare parts were up 7% in 1983 at \$1.7 billion. Long-term cost reduction programs contributed to improved gross margins on both JT8D and JT9D engines. Operating results still declined, however, as a result of a shifting product mix, as well as higher R&D and marketing expenses.

Shipments of JT8Ds declined in 1983 from 350 to 224. Despite termination of Boeing's JT8D-powered 727, good demand for the JT8D continued on Boeing's 737-200 and McDonnell Douglas' MD-80. McDonnell Douglas also launched the MD-83, powered by an advanced version of the JT8D engine. Volume was up on the JT9D from 130 to 158 because of market share gains and introduction of the new Airbus Industries A310 and Boeing 767.

Pratt & Whitney Canada

Because of the sharp decline in the general aviation industry for the second year, Pratt & Whitney Canada's sales were down substantially in 1983 to \$409 million. Engine shipments dropped, and research and development expenditures increased for future engines.

Some improvement in sales for the Canadian company could begin in 1984. Customers will begin taking delivery of such aircraft as the Beech 1900 and King Air 300, Cessna's Caravan I, and trainers for the U.S. Navy, all of which are powered either by the PT6 turboprop or JT15D turbofan. Four models of the PT6 engine and two models of the JT15D received FAA certification in 1983.

The new PW100 turboprop will power the deHavilland Dash 8, Embraer Brazilia, and Aerospatiale/Aeritalia ATR-42, new 30-50 passenger commuter aircraft. The PW100 enters production in 1984. In addition, Pratt Canada's engines were selected to power two new, pusher-type business aircraft. In pusher aircraft, the propeller is mounted behind the engine.

Difficult Year for Other Power Operations

Elliott experienced a sharp decline in its sales and earnings in 1983, reflecting depressed demand in the turbomachinery industry. However, good progress was made in product development and cost reductions.

Fuel Cell Operations' profitability was maintained in 1983. Shipments of small units to American utility companies began under a Department of Energy contract, and work continued on major fuel cell projects in Tokyo and New York.

International Support Systems continued its programs in Mexico and Saudi Arabia, and bid on a number of new projects.

Building Systems

Building Systems sales rose 11% in 1983 to \$4.9 billion, representing 33% of United Technologies' total. (These figures include Essex, which is now in Building Systems as a result of the corporate realignment in 1983.) Profit declined from 1982 because of the impact of unfavorable foreign exchange rates on Otis and Carrier, as well as start-up losses for Building Systems Company.

Recovery Begins at Carrier

Carrier's sales advanced about 13% to approximately \$2 billion in 1983 because of the turnaround in the United States residential air conditioning market. Operating profit increased even more rapidly, thanks to cost reduction programs.

In the United States, residential demand increased steadily along with housing construction throughout the year, while high-rise building remained in the doldrums. A number of new products were launched, including the first commercial entries with microprocessor-based controls. Carrier maintained its leading position in both residential and commercial unitary systems. In 1984, residential air conditioning shipments are expected to continue growing, and some improvement is projected in low-rise commercial construction as well.

Outside the United States, demand for air conditioners was poor. However, Carrier booked contracts for record numbers of big-building air conditioning systems in the Far East, among them, for Raffles Center in Singapore. Carrier's strategic push overseas during the year also included two important Carrier-controlled joint ventures: Delchi-Carrier in Italy and Springer-Carrier in Brazil. With these steps, Carrier became the largest manufacturer of room air conditioners in Italy and in all of South America, and moved up to No. 2 in the world market for room air conditioners. It is already No. 1 in all other categories of air conditioning.

Otis Maintains Its Number 1 Position

Otis' sales and earnings were strong in local currencies as a result of market share gains in new equipment and increased service maintenance contracts. Foreign exchange rates, however, caused unfavorable translation of results to the dollar. Reported sales were about flat at \$1.9 billion, and profits dipped.

In the United States, sales of gearless elevators were down due to the reduced construction of high-rise buildings. The introduction of new products, however, enabled Otis to raise its share of the domestic geared and hydraulic elevator sales to 25% and 19%, respectively. Profit margins in the United States improved because of the lower-cost design of the new entries and higher service volume.

In the Pacific area, Otis won five of the six major contracts in high-rise buildings awarded during the year in Hong Kong, Singapore, and the People's Republic of China New ventures formed in Taiwan, Thailand, and the People Republic of China bolstered Otis' business in the Far East, and Otis gained share in the important Japanese market.

In Europe, Otis continued to maintain its level of bookings, with some market share gains in the face of a downward drifting market. In Latin America, total elevator industry bookings were down significantly, but Otis held its leadership position. Maintenance and retrofit activities are generating solid business even in depressed markets.

Essex Maintains U.S. Market Share

Essex's sales increased substantially to almost \$900 millior in 1983 as a result of the full-year inclusion of Isola, a European company acquired in 1982, and higher volume in the United States. Earnings rose moderately in the United States but declined sharply in the depressed European market.

In building wire and cable, Essex was able to maintain the market share increases achieved in 1982 despite aggressive competition, thereby posting a unit volume increase.

The new Franklin, Tennessee plant, which uses the mos advanced techniques in the industry to draw, insulate, and cure magnet wire in one continuous operation, tested well during the year. This low-cost production approach should strengthen Essex's position in magnet wire.

Building Systems Company Expands

Much was accomplished in 1983 at Building Systems Company, although it operated at a loss because of start-uj investments and heavy price cutting in some private branc exchange (PBX) telephone markets. In two years, Building Systems has grown from three to about 2,500 people. Loss are expected to remain high in 1984 as Building Systems begins numerous projects.

Defense

Building Systems' first four "intelligent" buildings are nearing completion — for Aetna's Cityplace in Hartford, Citibank in San Francisco, LTV in Dallas, and Tower 49 in New York.

Building Systems won several new projects across the country to integrate building hardware and software with an electronic system for efficient operation. It also booked modernization contracts to retrofit existing buildings. During the year, Building Systems acquired The Headquarters Companies, which provide clients nationwide with ready-to-use executive suites and support services. It supplements Building Systems' office automation capabilities, which include such tenant services as electronic mail and teleconferencing.

In 1983, Building Systems reorganized and streamlined its telecom sales and service arm (United Technologies Communications Company), reducing administrative personnel in its sales and service operation by 78 while increasing the sales force by 20%. Orders and production of its Lexar PBX telephone equipment increased steadily. Building Systems also moved into a specialty niche of the PBX market with a hotel/motel phone. The newly opened Orlando Hilton was the first installation of this high-technology telephone system, which manages such functions as long distance call routing and accounting, air conditioning and heating, television, emergency call-up, smoke detection reporting, room security, direct access to hotel services, and data communications.

United Technologies' Defense Group was formed in 1983 to better serve the military market. It consists of the Sikorsky helicopter and Norden Systems electronic businesses. Sales advanced 21% to \$1.9 billion and earnings also rose.

Sikorsky Expands Market Share

Sikorsky, now clearly the world leader in the helicopter industry, posted record sales in 1983 of \$1.3 billion.

On the military side, the Black Hawk, which remains in rate production for the U.S. Army, was joined by the Seahawk version for the U.S. Navy. Twenty Super Stallion transport helicopters were delivered to the Marines and Navy in 1983, and the prototype of the minesweeper version was completed.

In 1983, effective overseas marketing efforts resulted in Sikorsky's first foreign orders for Black Hawks and the militarized version of the commercial S-76.

On the commercial side, sales of the executive version S-76 Mark II rose strongly, bringing the number of S-76 corporate operators to 45. The offshore oil market remained depressed.

Sikorsky announced plans to build a plant in Alabama to produce components made from composite compounds — strong, lightweight, fiber-reinforced materials used as substitutes for metal parts. Over the next five years, Sikorsky expects to quadruple its use of composites. The new plant also will supply aerospace manufacturers and other United Technologies' divisions.

Excellent Performance at Norden

Norden Systems finished 1983 with record sales. The company has maintained an excellent record for on-time delivery as well as good profitability, while managing its rapid growth.

Six international contracts were received in 1983 as a result of Norden's marketing thrust abroad. Norden also expanded its fully militarized computer line and received the first order for its MIL-VAX computer for use in the new Milstar Satellite communications system. In addition, program applications for the existing PDP-11/M militarized computers showed continued growth.

Norden's Chemical Systems Division won two major missile propulsion contracts — the third-stage motors for the Air Force's Minuteman II and the Navy's Trident II.

Industrial

Controls/Mostek

Sales of United Technologies' newly formed Industrial Group rose 14% to almost \$1.8 billion in 1983. Results were buoyed by the recovery of North American car and truck production to 10.7 million units. European automotive production increased about 5%. Profits of the group more than doubled year to year.

TO THE REPORT OF THE PARTY OF T

Good Year for Inmont

Inmont recorded steady gains in sales and earnings. With the resurgence in United States car production, automotive paint sales increased to original equipment manufacturers, such as General Motors. Inmont enhanced its position in the important new basecoat/clearcoat finishing system with its work on the new Corvette. Inmont also increased its share in the automotive paint aftermarket, helped by the introduction of a new product, Miracryl 2, an especially fast-drying refinish enamel.

Although demand for printing ink grew slowly, the company made increased profits by lowering its cost base. Inmont also strengthened its position in the European printing ink business through the acquisition of the Hartmann Group. This provided an entry into West Germany and increased Inmont's share in France.

Automotive Sales Rebound

The increase in North American and European car production enabled the Automotive unit to increase sales and earnings. It is the leading independent manufacturer of wire harnesses in North America and Europe and also gained share in electro-mechanical products. In addition, Ford conferred its highest quality rating to five Automotive plants, making United Technologies second among Ford suppliers in such awards.

Sales of diesel fuel injection systems for heavy-duty vehicles remained depressed, although orders strengthened late in 1983. Expansion of the diesel market for cars and light trucks appears further in the future than expected. Consequently, management shifted development of electronic diesel systems to heavy-duty vehicles. A key part of Automotive's drive to reduce costs and increase margins is its new automated plant in South Carolina, now in operation.

Automotive's Steelweld Robotics Systems received its first major United States contract in 1983 from Ford to supply 25 robots for spot-welding vehicle bodies.

Controls Unit Expands

United Technologies' Controls Group was formed in 1983. Despite the depression in the commercial aerospace industry, sales rose to over \$800 million because of new projects and growth in its military business. Late in 1983, demand began to improve in the industrial and appliance controls arena. To increase Controls' worldwide presence in aerospace products, Nord-Micro Elektronik of West Germany and its affiliate, Microtecnica of Italy, were acquired. Their product lines are represented in many major European aerospace programs.

During the year, Hamilton Standard's family of electronic engine controls successfully met operational and flight testing on a variety of aircraft, such as the 767 and A310, and development work began on controls for Pratt & Whitney's new PW4000 engine. Hamilton began deliveries of advanced lightweight, fuel-efficient propellers for virtually all the new-generation 30-50 passenger commuter planes, as well as environmental systems and engine controls. Hamilton's advanced work on its highly energy-efficient propfan attracted wide industry attention.

Hamilton Test Systems buttressed its position as the nation's leading supplier of computerized auto emissions inspection equipment when it added two more states to the list of state programs it manages. In 1983, the company tested more than 10 million vehicles across the country.

Mostek Moves Forward

The Mostek semiconductor subsidiary approached breakeven for all of 1983. Industry demand firmed in 1983, and Mostek did an outstanding job of bringing costs down. At the same time, it is investing heavily to reduce its reliance on the volatile memory market by diversifying its product line toward such areas as microprocessor peripherals, semicustom chips, and telecommunication circuits. Mostek's objective is to increase nonmemory products as a proportion of sales over the next several years.

Mostek became the leading merchant producer of 64K Random Access Memories in the U.S., ranking among the top four in the world; 1983 shipments totaled about 41 million units, up from six million in 1982. Mostek announced its entry into the 256K Dynamic Random Access Memory market in August and will begin production in 1984.

United Technologies enlarged its European electronics interest in 1983 when its joint venture in West Germany with AEGTelefunken GmbH, called TEG, began a venture with the Diehl Group to develop, produce, and market complementary metal/oxide semiconductor (CMOS) circuits through a joint company, EUROSIL Electronic GmbH. Mostek, TEG and EUROSIL are significant participants in the European semiconductor market with over \$200 million in sales.

Financial Summary

Originals in color.

20.0

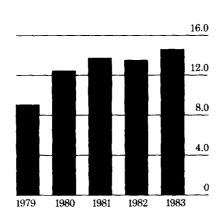
Sales

(\$ in billions)

■ Government

■ Commercial

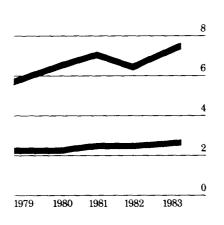
(\$)



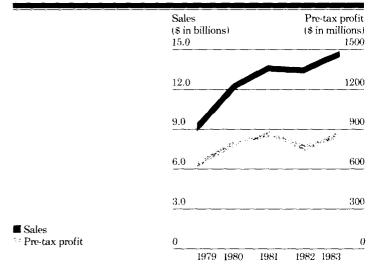
Earnings* and Dividends per Share on Common Stock

*Excludes extraordinary items of \$1.60 per share in 1982.

■ Fully Diluted EPS
■ Dividends

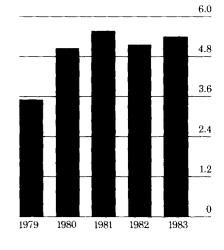


Sales and Pre-tax Profit



Sales in International Markets

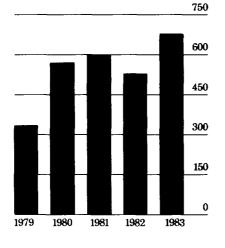
(\$ in billions)



Originals in color.

Capital Expenditures

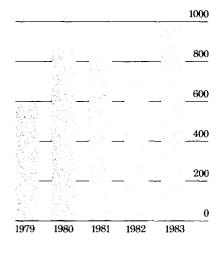
(\$ in millions)



Total Funds Generated by Operations*

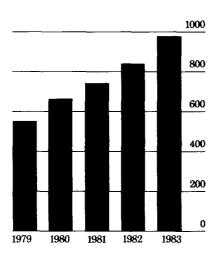
(\$ in millions)

*See Consolidated Statement of Changes in Financial Position.



Company-Funded R&D Expenditures

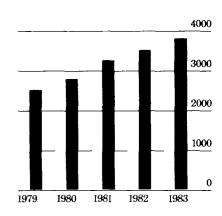
(\$ in millions)



Total Debt* to Equity

(\$ in millions)

*Short-term and Long-term debt.



Debt Equity

5000

Five-Year Summary

Dollars in Thousands (except per share amounts)		1983		1982		1981		1980		1979
For the Year:										
Sales	\$14,66	9 265	¢1'	3,577,129	¢1'	3,667,758	\$ 1	2,323,994	\$9	,053,358
Percent to United States Government	\$14,00	33%	ψΙ	33%	фт	28%	ΨΙ	22%	ψυ	23%
Cost of goods and services sold	\$10,76		\$ 9	9,956,151	\$10	0,081,262	\$	9,038,161	\$6	,542,480
Research and development		0,790	\$	834,476	\$	735,825	\$	660,296		545,471
Selling, service and administrative		3,874	\$	1,916,892		1,827,256		1,684,046		,281,303
Interest expense		8,573	\$	250,886	\$	244,839	\$	229,848		138,589
Income taxes		5,104	\$	318,244	\$	402,691	\$	373,844	\$	284,050
Income before extraordinary item and cumulative effect of change in accounting	·	,		,		•		ŕ		ŕ
principle—1982			\$	426,874						
Net income	\$ 50	9,173	\$	533,721	\$	457,686	\$	393,383	\$	325,608
Preferred Stock dividend requirement	\$ 6	6,824	\$	69,570	\$	76,835	\$	81,239	\$ \$	55,562
Earnings applicable to common stock		2,349	\$	464,151	\$	380,851	\$	312,144	\$	270,046
Earnings per share:										
Income before extraordinary item and										
cumulative effect of change in										
accounting principle—1982:										
Primary			\$ \$	6.73						
Fully diluted			\$	6.41						
Net Income:	ф	# O.4	Ф	0.74	ው	7.71	ው	7.00	ው	C 40
Primary	\$ \$ \$ 14	$\begin{array}{c} 7.94 \\ 7.48 \end{array}$	\$ \$	$8.74 \\ 8.01$	\$ \$	$7.71 \\ 7.05$	\$ \$	$7.28 \\ 6.51$	\$ \$	6.49 5.71
Fully diluted Cash dividends on common stock	ወ ቁ 1 <i>4</i>	1.46 $1,241$	φ \$	127,265	Ф \$	118,136	φ \$	94,447	\$	91,699
Per share	\$ 14 \$	$\begin{array}{c} 1,241 \\ 2.55 \end{array}$	Φ \$	2.40	φ \$	2.40	φ \$	$\frac{34,447}{2.20}$	φ \$	2.20
Average number of shares of	Ψ	2.00	Ψ	2,40	Ψ	2.40	Ψ	2.20	Ψ	2.20
Common Stock outstanding:										
Primary	55,71	6.995	5	3,104,845	4	9,402,486	4	2,855,312	41	,625,259
Fully converted	68,10			6,616,320		4,958,277		0,138,481		510,920
2 44.0		_,	-	-,,	-	-, ,		, , , , , , , , , , , , ,		,,-
Total funds generated by operations										
(cash flow)*		$0,\!356$	\$	789,998	\$	824,691	\$	866,503		591,758
Capital expenditures		4,818	\$	528,353	\$	591,192	\$	569,088	\$	331,175
Depreciation		2,456	\$	325,811	\$	277,630	\$	226,298	\$	155,989
Salaries and wages	\$ 4,15	8,879	\$	3,928,648	\$	3,859,152	\$	3,635,329	\$2	2,894,122
Return on sales, after tax		3.5%		3.1%**		3.3%		3.2%		3.6%
Asset turnover (sales/assets)		1.83		1.77		1.86		1.85		1.85
Return on assets, after tax		6.3%		5.6%**		6.2%		5.9%		6.6%
Return on equity, after tax		14.0%		12.8%**		15.0%		14.9%		15.1%

^{*}See Consolidated Statement of Changes in Financial Position, page 25 of this Annual Report.
** Income before extraordinary item and cumulative effect of change in accounting principle.

Dollars in Thousands (except per share amounts)	1983	1982	1981	1980	1979
At Year End:					
Net working capital	\$ 1,645,600	\$ 1,554,104	\$ 1,573,982	\$ 1,359,139	\$ 1,480,024
Current asset ratio	1.5 to 1	1.5 to 1	1.5 to 1	1.4 to 1	1.6 to 1
Total assets	\$ 8,720,059	\$ 7,993,376	\$ 7,555,103	\$ 7,336,016	\$ 6,468,806
Short-term borrowings	\$ 398,149	\$ 449,391	\$ 392,762	\$ 663,548	\$ 436,473
Long-term debt	\$ 929,133	\$ 982,333	\$ 906,776	\$ 892,843	\$ 944,875
Debt to total capitalization	26%	29%	29%	36%	36%
Net worth	\$ 3,783,755	\$ 3,481,790	\$ 3,212,511	\$ 2,734,853	\$ 2,487,156
Common shareowners' equity	\$ 3,253,897	\$ 2,775,784	\$ 2,445,910	\$ 1,864,827	\$ 1,599,860
Equity per common share	\$ 54.43	\$ 51.12	\$ 47.14	\$ 42.71	\$ 37.99
Unfilled orders	\$12,100,000	\$11,700,000	\$11,650,000	\$11,400,000	\$10,500,000
Number of employees:	, , ,	, ,		. , ,	
United States	122,300	120,200	124,700	136,200	136,500
International	,	,	,	•	•
Europe	34,900	32,500	30,000	28,000	28,500
Other	36,500	31,200	35,000	36,000	32,700
Total	193,700	183,900	189,700	200,200	197,700
Number of shareowners	68,500	77,400	81,500	86,600	88,200

Notes: Effective January 1, 1982, the Corporation changed its method of accounting for investment tax credits from the deferral method to the flow-through method. Net income for 1982 includes \$66.6 million (\$1.25 primary earnings per share and \$1.00 fully diluted earnings per share) cumulative effect of this change in accounting principle. Pro forma amounts for the years 1979 through 1981, assuming retroactive application of the accounting change, are: net income for 1981 — \$473.6 million, 1980 — \$408.3 million and 1979 — \$331.4 million; primary earnings per share for 1981 — \$8.03, 1980 — \$7.63 and 1979 — \$6.63; and fully diluted earnings per share for 1981 — \$7.29, 1980 — \$6.76 and 1979 — \$5.81. See Note 2 of Notes to Financial Statements.

In June 1982, the Corporation reacquired \$165 million of debentures in exchange for cash and 1,919,311 shares of Common Stock resulting in an extraordinary gain of \$40.2 million (\$.76 primary earnings per share and \$.60 fully diluted earnings per share). See Note 4 of Notes to

Financial Statements.

Effective January 1, 1981 the Corporation adopted the provisions of Statement of Financial Accounting Standard No. 52, "Foreign Currency Translation." The principal effect of FAS No. 52 has been that most of the large foreign exchange translation losses which have resulted from the strengthening of the U.S. dollar in 1981, 1982 and 1983 have been deferred as a component of Shareowners' Equity, and accordingly did not affect reported earnings. The portion of the net exchange losses deferred as a component of Shareowners' Equity in 1981, which would have been charged against income under the previously effective Financial Accounting Standard, amounted to \$42,706,000, net of income tax effects, equivalent to \$.86 primary earnings per common share, or \$.66 per share on a fully diluted basis. See Note 6 of Notes to Financial Statements.

Primary earnings per share are based on the average number of shares of Common Stock outstanding during each year. Fully diluted earnings per share reflect the maximum dilution of per share earnings which would have occurred if all of the dilutive convertible securities of

the Corporation had been converted on the dates of issue.

Equity per common share is based on shares outstanding at each year end.

The consolidated results of operations include Carrier Corporation from July 1, 1979 and Mostek Corporation from November 1, 1979.

Management's Discussion and Analysis of Results of Operations and Financial Position

The following discussion and analysis sets forth certain factors which produced changes in the Corporation's results of operations during the three years ended December 31, 1983, and comments on the Corporation's financial position at that date as presented in the accompanying financial statements. Operating results of the Corporation's business segments, reportable in accordance with Financial Accounting Standard No. 14, are shown in the Consolidated Summary of Business Segment Financial Data on pages 39 through 41 of this Annual Report. Attention is drawn to Notes 2, 4 and 6 of Notes to Financial Statements regarding the effects of the change in method of accounting for investment tax credits and the extraordinary gain from the reacquisition of long-term debt in exchange for cash and Common Stock, both in 1982, and the adoption of Financial Accounting Standard No. 52, "Foreign Currency Translation," in 1981.

In addition to the factors noted below, continuing economic inflation drove up material prices, employee compensation and other costs, and the Corporation's selling prices to customers, although to a lesser extent in 1983 and 1982 than in earlier years. Data which may be helpful in assessing the impact of inflation is set forth in Note 18, "Changing Prices," in the accompanying financial statements.

Results of Operations

Sales:

increased 8% or \$1.1 billion from 1982 to 1983; decreased 1% or \$0.1 billion from 1981 to 1982.

It is estimated that increases in selling prices to customers averaged 3% in 1983, indicating that the increase in real volume of sales was approximately 5%. While the indicated decrease in consolidated sales was 1% from 1981 to 1982, it is estimated that increases in selling prices to customers averaged 6% in 1982, indicating that the decrease in real volume of sales in 1982 was approximately 7%, due to the business recession and other factors discussed below.

Sales of the Corporation's principal business segments for the three years ended December 31, 1983 were:

In Millions of Dollars	1983	1982	1981
Power	\$5,146.1	\$5,271.6	\$5,566.7
Flight Systems	\$2,321.9	\$1,996.8	\$1,656.7
Building Systems	\$3,950.4	\$3,683.8	\$3,741.6
Industrial Products for the Automotive, Electronics		·	•
and Other Industries	\$3,156.2	\$2,524.9	\$2,587.6

Power sales decreased by \$125.5 million, or 2% in 1983 from the preceding year and decreased by \$295.1 million, or 5%, in 1982. Sales of military engines and spare parts decreased approximately 2% in 1983, compared to an increase of 10% in 1982. Sales to the commercial airline market increased approximately 7% in 1983 but the increase resulted primarily

from shipment of aircraft engines early in 1983 which had been ordered up to two years earlier, and not from any general recovery in the commercial airline market. In 1982, sales of engines and spare parts in that market were down approximately 19%, compared to 1981, due to airline overcapacity and financial constraints, decreased production of aircraft with the Corporation's JT8D engine, the effect upon spare parts sales of reduced airline operations, and the general recession. Sales of engines and spare parts for the general aviation market were down 14% in 1983 from the preceding year, and 32% in 1982, due to the business recession.

Flight Systems sales increased by \$325.1 million, or 16%, for 1983 and \$340.1 million, or 21%, for 1982. These increases resulted from higher sales of military helicopters and spare parts, and other aircraft products. Sales of commercial helicopters were down significantly in 1982, due to unfavorable conditions in the markets for such aircraft which continued in 1983.

In 1983, Building Systems segment revenues increased 7%, or \$266.6 million, due to increases in sales in the air-conditioning business and in sales from new businesses in the Building Systems Company subsidiary. Building Systems segment revenues decreased \$57.8 million, or 2%, for 1982, the net effect of a decrease in air-conditioning sales, reflecting depressed economic conditions in the construction industry, and an increase in the elevator business. Building Systems segment revenues were adversely affected in 1982 and again in 1983 to the extent of approximately \$263 million and \$187 million, respectively, from the translation of sales of foreign subsidiaries at less favorable foreign exchange rates than in the preceding year, after adjusting for the estimated effect upon the exchange rates of local inflation in highly inflationary countries.

Revenues related to Industrial Products improved with the business recovery in 1983. Sales were up 25%, or \$631.3 million, principally as a result of higher sales to the automotive industry and increased sales of wire and cable and semiconductor products. Revenues related to Industrial Products were down 2%, or \$62.7 million, in 1982 from 1981 as the result of lower sales of automotive and semiconductor products, principally due to the business recession.

Other income, net, increased:

9% or \$12.5 million from 1982 to 1983; 44% or \$42.2 million from 1981 to 1982.

The increase in 1983 was attributable to higher interest income, and proceeds from the discontinued use of a trade name, less a net reduction in other items. The increase in 1982 was due to lower foreign exchange losses charged against other income and an increase in commission income. Also included was a gain, not material in amount, from the sale in the second quarter of 1982 of the Corporation's Jenn-Air subsidiary.

The Corporation adopted Financial Accounting Standard No. 52, "Foreign Currency Translation," effective January 1, 1981. Pursuant to that Standard, net foreign exchange losses on certain transactions and on operations in highly inflationary economies of \$6.2 million in 1983, \$7.0 million in 1982 and \$12.1 million in 1981 were included in other income. The principal effect of the adoption of FAS No. 52 has been that most of the

large foreign exchange translation losses which have resulted from the strengthening of the U.S. dollar against foreign currencies in 1981, 1982 and 1983 have been deferred as a component of Shareowners' Equity, and accordingly did not affect reported earnings. (See Note 6 of Notes to Financial Statements.)

Research and development expenses increased:

16° or \$136.3 million from 1982 to 1983;

13% or \$98.7 million from 1981 to 1982.

The rise in research and development expenses in both years was due principally to higher expenditures in the Power segment on advanced engine models. Expenditures in that segment are expected to increase further in 1984 because of continuing large expenditures for the development of the PW2037 engine and the PW4000 engine series.

Selling, service and administrative expenses increased:

5% or \$97.0 million from 1982 to 1983;

5% or \$89.6 million from 1981 to 1982.

Selling, service and administrative expenses increased in both years as a result of generally higher salaries and wages and other expenses.

Interest expense:

decreased 17% or \$42.3 million from 1982 to 1983; increased 2% or \$6.0 million from 1981 to 1982.

Interest expense in 1983 was \$208.6 million. The decrease from 1982 reflects both lower average borrowings and reduced short-term interest rates. Interest expense in 1982 was \$250.9 million. The increase over 1981 was due to substantially higher average short-term borrowings partially offset by a reduction in short-term interest rates in the latter part of the year. The weighted average interest rate paid on the Corporation's short-term borrowings in 1983 was 11.4% (13.0% in 1982 and 16.3% in 1981) and the average composite rate for short-term borrowings and long-term debt for 1983 was 11.1% (11.5% for 1982 and 12.7% for 1981). The average rate applicable to debt outstanding at December 31, 1983 was 13.1% for the short-term borrowings, and the average composite rate including long-term debt was 10.8%.

Operating profit:

increased 6% or \$50.6 million from 1982 to 1983; decreased 15% or \$151.7 million from 1981 to 1982.

Operating profits of the Corporation's principal business segments for the three years ended December 31, 1983 were:

In Millions of Dollars	1983	1982	1981
Power	\$301.4	\$420.4	\$596.4
Flight Systems	\$198.2	\$169.3	\$105.5
Building Systems	\$272.0	\$257.1	\$285.2
Industrial Products for the Automotive, Electronics	•		,
and Other Industries	\$159.6	\$ 34.5	\$ 34.5

In the Power segment, the decreases in operating profit of \$119.0 million, or 28%, for 1983 and \$176.0 million, or 30%, for 1982, occurred mainly in the Corporation's commercial airline engine and spare parts business, and to a lesser extent in the general aviation engine business. They were due to the sharply reduced level of sales of engines and spare parts in those markets beginning in 1982, referred to above, together with increasingly higher levels of commercial engine research and development and engine certification costs in both years, higher fleet introductory assistance costs in 1983, and loss provisions in 1982 of approximately \$25 million related to the bankruptcy of a major airline.

Operating profit gains of \$28.9 million, or 17%, and \$63.8 million, or 60%, for 1983 and 1982, respectively, in the Flight Systems segment reflect the higher sales referred to above and, from 1982 onward, substantially improved profitability in

the Corporation's military helicopter business.

The increase in operating profit of the Building Systems segment in 1983 of \$14.9 million, or 6%, reflects the higher sales in the air-conditioning business, noted above, partially offset by the effects of less favorable exchange rates than in the prior year for the translation of foreign subsidiaries' earnings, and losses related to new businesses and products in the Building Systems Company subsidiary. In 1982, lower sales of air-conditioning equipment, together with less favorable foreign exchange rates and losses of the Building Systems subsidiary, partially offset by improved volume and gross margins in the elevator business, caused the decrease in operating profit of \$28.1 million, or 10%, from the prior year.

In the Industrial Products segment, operating profits increased \$125.1 million, or 363%, in 1983 reflecting the significant recovery in sales to the automotive industry referred to above, together with improved sales and operating results in the segment's semiconductor business. Since early 1981 the semiconductor industry had been experiencing conditions of low customer demand, overcapacity and intense price competition, which together with costs of new product development, resulted in operating losses in that business. A major restructuring program was undertaken which significantly reduced the semiconductor losses in the second half of 1982, and in 1983 there was significant improvement in customer demand and selling prices in the industry. As a result, the segment's semiconductor operations approached break-even in 1983. There had been a significant downturn in operating profit of the segment's automotive business in 1982 due to the depressed condition of the automotive industry, and to costs of new product development; substantial improvement was recorded in 1983. Operating profits of the segment's wire and cable business were at a low level in 1983 and 1982, compared to 1981, due to the business recession.

As a net result of the aforementioned, pretax income from operations:

increased 13.4% or \$101.5 million from 1982 to 1983; decreased 13% or \$117.7 million from 1981 to 1982.

The effective income tax rate for U.S. federal, state and foreign income taxes was 39% for 1983, compared to 42% in 1982. The reduction in effective tax rate resulted from higher

U.S. tax credit for qualified research expenditures, and other factors. The reduction in effective tax rate to 42% in 1982 compared to 46% in 1981 resulted primarily from the change to the flow-through method of accounting for the investment tax credits (see Note 2 of Notes to Financial Statements) and from the effect of the U.S. tax credit for qualified research expenditures.

Net income:

decreased 5% or \$24.5 million from 1982 to 1983; increased 17% or \$76.0 million from 1981 to 1982.

Net income for 1982 included the cumulative effect of a change in accounting method for investment tax credits, which increased net income by \$66.6 million, and an extraordinary gain of \$40.2 million from the reacquisition of \$165 million principal amount of the Corporation's debentures in exchange for cash and Common Stock. See Notes 2 and 4 of Notes to Financial Statements for an explanation of these matters, and see the Consolidated Statement of Income which presents their impact on net income and earnings per share of Common Stock. Net income from operations (excluding the 1982 effect of the change in accounting method and extraordinary gain) increased from 1982 to 1983 by \$82.3 million, or 19%.

Financial Position

Management assesses the Corporation's liquidity in terms of its overall ability to mobilize cash to fund its operations. Of particular importance in the management of liquidity are funds generated by operations; levels of accounts receivable, inventories and fixed asset additions; adequate bank lines of credit; and financial flexibility to attract long-term capital on satisfactory terms.

The following tabulation summarizes, from the Consolidated Statement of Changes in Financial Position for the three years ended December 31, 1983, the funds generated by the Corporation's operations (net income adjusted for items not currently requiring or providing cash), and other sources and requirements for cash to meet operating needs including working capital and fixed asset expenditures.

In Millions of Dollars	1983	1982	1981
Funds generated by operations (Increases) decreases in: Current and long-term	\$990	\$ 790	\$ 825
receivables	(116)	(77)	19
Inventories	(127)	(134)	46
Investments	(28)	(109)	8
Fixed asset additions, net Changes in accounts payable	(625)	(577)	(557)
and accruals	351	77	(77)
Other	(80)	(32)	(69)
Net funds provided by (used for) operating transactions	\$365	\$ (62)	\$ 195

Accounts receivable and inventories increased an aggregate \$454 million or 10% in 1983 and 1982. The increases resulted in part from the inclusion of businesses acquired during those years (none of which was material to the Corporation's business), as well as to increasing sales levels in most of the Corporation's business segments. High levels of accounts receivable and inventories are expected to continue through 1984, and their level will be affected by the business conditions, including the extent of further economic recovery and inflation rates, in the businesses in which the Corporation operates.

The substantial fixed asset additions during the period 1981 through 1983, shown above, have been necessary to increase productivity, to keep the Corporation's facilities modern, and to provide for expansion of some product lines. Fixed asset expenditures are expected to increase in 1984 by as much as 25% over 1983.

As indicated in the foregoing tabulation, funds generated by operations aggregated \$2,605 million for the three years ended December 31, 1983, and were available for the substantial working capital and fixed asset requirements during that period. Other financial requirements during the period included maturing long-term debt of \$155 million, purchases of the Corporation's convertible preferred stock which aggregated \$57 million in 1981 and 1982, and dividends to preferred and common shareowners. Cash of \$63 million was also required for the June 1982 exchange of cash and Common Stock for \$165 million of the Corporation's outstanding long-term debentures, which was undertaken in order to take advantage of the substantial discounts at which the debentures were trading.

To meet its net financing requirements indicated above, during the three years ended December 31, 1983 the Corporation increased its short-term borrowings as required, issued new long-term debt when conditions were considered favorable, and in March 1981 sold 5,000,000 shares of its Common Stock in a public offering, realizing \$258 million which was used to reduce short-term borrowings. The results of the foregoing activities upon the Corporation's financial structure are shown in the following tabulation:

In Millions of Dollars - December 31	1983	1982	1981
Short-term borrowings Long-term debt Shareowners' equity Debt to total capitalization	\$ 398	\$ 449	\$ 393
	\$ 929	\$ 982	\$ 907
	\$3,784	\$3,482	\$3,213
	26%	29%	29%

The ratio of debt to total capitalization is of particular significance as an indicator of the Corporation's potential ability to utilize the markets for short-term and long-term debt on favorable terms. Management considers a debt to total capitalization ratio not in excess of 35% to be satisfactory, although a substantially lower ratio is desirable.

In addition to the funds requirements discussed above, the Corporation's finance subsidiaries had financing commitments to customers at December 31, 1983 of approximately \$425 million, of which \$125 million is expected to be disbursed in 1984.

At December 31, 1983, the Corporation had bank credit lines totaling \$2.0 billion, of which \$3 million had been borrowed and \$340 million served as informal backup for outstanding commercial paper of the Corporation and its unconsolidated finance subsidiaries. The balance of the bank credit lines, \$1.6 billion, is available for further borrowings, as needed. Long-term debt and equity offerings also will be considered in the future if conditions in the securities markets make such

offerings advantageous, and in that regard Registration Statements had been filed with the Securities and Exchange Commission at December 31, 1983 under which up to \$200 million of long-term debt of the Corporation, and up to \$150 million of long-term debt of UT Credit, might be issued.

Management believes that available sources of funds, indicated above, should be adequate to meet its presently foreseeable cash requirements.

Comparative Stock Data

United Technologies Corporation

1983

1982

	High	Low	Dividend	High	Low	Dividend
Common Stock						
First Quarter	70%	53%	\$.60	43%	311/4	\$.60
Second Quarter	76¾	$66\frac{3}{4}$.65	40%	35	.60
Third Quarter	731/2	64	.65	501/2	361/2	.60
Fourth Quarter	731/2	63¾	.65	58%	45%	.60
\$2.55 Preferred Stock						
First Quarter	33	27	\$.6375	21%	191⁄2	\$.6375
Second Quarter	361/4	321/8	.6375	$22\frac{1}{8}$	201/8	.6375
Third Quarter	35%	311/4	.6375	25	211/8	.6375
Fourth Quarter	331/2	311/4	.6375	$28\frac{1}{8}$	24%	.6375
\$8.00 Preferred Stock						
First Quarter	306	27 1	\$2.00	$187\frac{1}{2}$	140	\$2.00
Second Quarter	319	310	2.00	$172\frac{3}{4}$	1321/4	2.00
Third Quarter	3171/8	307	2.00	215	1751/2	2.00
Fourth Quarter	310	309	2.00	248	219	2.00

The Corporation's Common and \$2.55 and \$8.00 Preferred Stocks are listed on the New York Stock Exchange.

The high and low prices are based on the Composite Tape.

The number of shareowners of record at December 31, 1983 were: Common Stock - 45,996, \$2.55 Preferred Stock - 20,450 and \$8.00 Preferred Stock - 1,552.

Management's Responsibility for Financial Statements

Report of Independent Accountants

The financial statements of United Technologies Corporation and consolidated subsidiaries, and all other information presented in this Annual Report, are the responsibility of the management of the Corporation. The financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied except for the accounting change described in Note 2 of Notes to Financial Statements, with which our independent accountants concur.

Management is responsible for the integrity and objectivity of the financial statements, including estimates and judgments reflected in them. It fulfills this responsibility primarily by establishing and maintaining accounting systems and practices adequately supported by internal accounting controls. These controls include the selection and training of management and supervisory personnel; an organization structure providing for delegation of authority and establishment of responsibilities; communication of requirements for compliance with approved accounting, control and business practices throughout the organization; business planning and review; and a program of internal audit. Management believes the internal accounting controls in use provide reasonable assurance that the Corporation's assets are safeguarded, that transactions are executed in accordance with management's authorizations, and that the financial records are reliable for the purpose of preparing financial statements.

Independent accountants are elected annually by the Corporation's shareowners to examine the financial statements in accordance with generally accepted auditing standards. Their report appears in this Annual Report. Their examinations, as well as those of the Corporation's internal audit department, include a review of internal accounting controls and selective tests of transactions.

The Audit Review Committee of the Board of Directors, consisting of six directors who are not officers or employees of the Corporation, meets regularly with management, the independent accountants and the internal auditors, to review matters relating to financial reporting, internal accounting controls and auditing.

To the Shareowners of United Technologies Corporation

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, changes in shareowners' equity and of changes in financial position present fairly the financial position of United Technologies Corporation and its subsidiaries at December 31, 1983 and 1982, and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1983, in conformity with generally accepted accounting principles consistently applied during the period except for the change, with which we concur, in the method of accounting for investment tax credits as described in Note 2 of Notes to Financial Statements. Our examinations of these statements were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse

One Financial Plaza Hartford, Connecticut January 25, 1984

		Years	End	ed December	31,	
In Thousands of Dollars (except per share amounts)		1983		1982		1981
					-===	
Revenues:	•		•	0 = ## + 00	.	
Sales	\$1	4,669,265	\$1	3,577,129	\$13	3,667,758
Other income, less other deductions	<u> </u>	151,487	Ф 1	139,000	Ø 1 4	96,839
Costs and Evnesses	<u> </u>	4,820,752	Φ1	3,716,129	— ф1	3,764,597
Costs and Expenses: Cost of goods and services sold	\$1	0,768,274	¢.	9,956,151	\$10	0,081,262
Research and development	ΨΙ	970,790	Ψ	834,476	ΨΙ	735,825
Selling, service and administrative expenses		2,013,874		1,916,892		1,827,256
Interest expense		208,573		250,886		244,839
	\$1	3,961,511	\$1	2,958,405	\$13	2,889,182
Income before income taxes	\$	859,241	\$	757,724	\$	875,415
Income taxes	•	335,104	•	318,244		402,691
Income before minority interests	\$	524,137	\$	439,480	\$	472,724
Less - Minority interests in subsidiaries' earnings	<u> </u>	14,964		12,606		15,038
Income before extraordinary item and cumulative effect of change						
in accounting principle	\$	509,173	\$	426,874	\$	457,686
Extraordinary gain				40,226		
Cumulative effect of change in accounting principle	_			66,621		
Net Income	\$	509,173	\$	533,721	\$	457,686
Preferred Stock Dividend Requirement	\$	66,824	\$	69,570	\$	76,835
Earnings Applicable to Common Stock	\$	442,349	\$	464,151	\$	380,851
Per Share of Common Stock:				,,,		
Primary:						
Income before extraordinary item and cumulative effect of change		67.04		ec 7 9		Ф <i>П</i> 771
in accounting principle Extraordinary gain		\$7.94		\$6.73 .76		\$7.71
Cumulative effect of change in accounting principle				1.25		_
Net Income		\$7.94		\$8.74		\$7.71
		ψιιστ		φοιιτ		Ψίι
Fully Diluted:						
Income before extraordinary item and cumulative effect of change in accounting principle		\$7.48		\$6.41		\$7.05
Extraordinary gain		ψ1.40 —		.60		ψ1.00 —
Cumulative effect of change in accounting principle				1.00		
Net Income		\$7.48		\$8.01		\$7.05
Pro forma assuming retroactive application of change in accounting		.				
principle:						
Income before extraordinary item	\$	509,173	\$	426,874	\$	473,580
Per Share of Common Stock		67.04		ec 7 0		ቀር ለባ
Primary earnings Fully diluted earnings		\$7.94 \$7.48		\$6.73 \$6.41		\$8.03 \$7.29
Net Income			ф	467,100	\$	473,580
net income	\$	OU9. F23		44()////////	• 17	
Per Share of Common Stock	\$	509,173	\$	407,100	φ	470,000
	\$	\$7.94 \$7.48	ð	\$7.49 \$7.01	φ	\$8.03 \$7.29

	Decem	ber 31,
n Thousands of Dollars	1983	1989
Assets		
Current Assets:	¢ 921 702	¢ 191.47
Cash and short-term cash investments Accounts receivable	$\begin{array}{c} \$ & 231,793 \\ 1,721,830 \end{array}$	$\begin{array}{c} \$ & 121,47 \\ 1,552,30 \end{array}$
nventories and contracts in progress	4,907,227	4,968,58
Less – Progress payments and billings on contracts in progress	(1,914,582)	(2,102,59)
Prepaid expenses	72,298	64,00
Total Current Assets	\$5,018,566	\$4,603,77
	\$ 105,918	\$ 152,38
accounts and notes receivable due after one year		
Inconsolidated subsidiaries and other investments	\$ 336,365	\$ 298,43
fixed Assets, at cost:	4 100 0 4	A 10F.01
and	\$ 160,254	\$ 137,91
Buildings and improvements	1,472,251	1,360,57
Machinery, tools and equipment Jnder construction	$3,087,661 \\ 349,864$	2,800,27 $242,47$
onder construction		
I am Annual atad depression and amortination	\$5,070,030 (2,383,073)	\$4,541,24
Less – Accumulated depreciation and amortization	$\frac{(2,382,073)}{42,337,057}$	(2,155,10)
	\$2,687,957	\$2,386,13
Deferred Charges:	A. FOF 404	A 500 40
Costs in excess of net assets of acquired companies (net of amortization)	\$ 535,404	\$ 532,42
Other	35,849	20,2
	<u>\$ 571,253</u>	\$ 552,64
Total Assets	\$8,720,059	\$7,993,33
iabilities and Shareowners' Equity		
Current Liabilities:		
Short-term borrowings	\$ 398,149	\$ 449,39
Accounts payable	1,068,773	871,09
Accrued salaries, wages and employee benefits	616,818	586,2
Other accrued liabilities	724,416	781,53
Long-term debt — currently due	60,165	55,18
ncome taxes:	40=000	-0-0
Currently payable	197,902	101,03
Deferred	104,460	86,11
Advances on sales contracts	202,283	119,0'
Total Current Liabilities	\$3,372,966	\$3,049,66
Deferred income taxes	\$ 279,308	\$ 246,26
ong-term debt	\$ 868,968	\$ 927,18
Other long-term liabilities	\$ 325,774	\$ 219,88
Commitments and contingent liabilities (Note 16)		
Minority interests in subsidiary companies	\$ 89,288	\$ 68,58
Shareowners' Equity:		
Capital Stock:		
Preferred Stock, \$1 par value (Authorized - 100,000,000 shares)		
Outstanding – 20,933,543 and 24,330,271 shares, respectively	\$ 532,278	\$ 697,7'
(Aggregate liquidating preference $-\$529,858,000$)		
Common Stock, \$5 par value (Authorized - 200,000,000 shares)		
Outstanding – 59,783,127 and 54,299,592 shares, respectively	1,353,980	1,143,98
Deferred foreign currency translation adjustments	(199,336)	(157,60
Retained earnings	2,096,833	1,797,70
Total Shareowners' Equity	\$3,783,755	\$3,481,79
Total Liabilities and Shareowners' Equity	\$8,720,059	\$7,993,37

Consolidated Statement of Changes in Financial Position

Funds provided by (used for) operating transactions:

Minority interests in subsidiaries' earnings

Cumulative effect of change in accounting principle

Items not requiring or providing cash:

Change in deferred income taxes

Amortization of goodwill

Issuance of long-term debt

Extraordinary gain

In Thousands of Dollars

Depreciation

Net income

United Technologies Corporation

Years Ended December 31,

1983	1982	1981
\$ 509,173	\$ 533,721	\$ 457,686
372,456	325,811	277,630
28,080	23,128	26,256
53,580	49,399	75,600
14,964	12,606	15,038
	(40,226)	<u>.</u>
_	(66 621)	

\$ 327,275

\$ 15,783

\$ (46,484)

\$ 58,348

\$(174,464)

\$ 20,927

\$ 13,103

\$(254,753)

\$ 110,322

Other	12,103	(47,820)	(27,519)
Total funds generated by operations	\$ 990,356	\$ 789,998	\$824,691
(Increase) decrease in current and long-term receivables	(116,456)	(76,948)	19,070
(Increase) decrease in inventories	(126,653)	(133,834)	46,335
Increase (decrease) in accounts payable and accrued liabilities	351,182	76,588	(77,024)
Additions to fixed assets, net of retirements	(624,757)	(576,871)	(557,195)
(Increase) decrease in investments	(28,286)	(108,837)	8,546
Other	(80,311)	(32,363)	(69,032)
Net Funds Provided by (Used For) Operating Transactions	\$ 365,075	\$ (62,267)	\$ 195,391

Funds provided by (used for) financing activities: Debt transactions:

Repayments of long-term debt	(60,977)	(200,308)	(35,200)
Increase (decrease) in short-term borrowings	(51,242)	56,629	(270,786)
Other	12,436	(80)	(4,580)
Equity transactions:			. ,
Common Stock issued	_	65,562	258,474
Preferred Stock repurchased		(53,286)	(5,570)
Other	39,992	16,826	19,821
Dividends paid on Common and Preferred Stocks	(208,065)	(196,835)	(194,971)

Net Funds From (Used For) Financing Activities and Dividends Net Increase (Decrease) in Cash and Short-Term Cash Investments

Notes: Changes in assets and liabilities shown above include assets and liabilities acquired in business acquisitions. Such amounts were not material in the three years ended December 31, 1983.

Other equity transactions include the effects of preferred stock conversions and the issuance of stock under employee incentive plans.

See accompanying Notes to Financial Statements

Consolidated Statement of Changes In Shareowners' Equity

Three Years Ended December 31, 1983

\$4.50 Preferred Stock	
\$3,470	Balance December 31, 1980
	Issued on conversion of convertible debentures (90,052 shares)
	Issued on conversion of 1,132,672 shares of Preferred Stock (2,866,517 shares) Issued under employee incentive plans, and related tax benefit:
	191,666 shares of Preferred Stock, net of 4,097 shares purchased and reissued
	349,962 shares of Common Stock, net of 157,905 shares purchased and reissued
(1,456)	Redemption and purchase of 59,151 shares of Preferred Stock
	Issuance of Common Stock (5,000,000 shares)
	Deferred foreign currency translation adjustments: Opening period adjustment
	Translation adjustments
	Income tax adjustments
	Net income
	Dividends on:
	Common Stock (\$2.40 per share) Preferred Stock
\$2,014	Balance December 31, 1981
	Issued on conversion of convertible debentures (32,150 shares)
	Issued on conversion of 57,642 shares of Preferred Stock (147,938 shares) Issued under employee incentive plans, and related tax benefit:
	94,997 shares of Preferred Stock, net of 462 shares purchased and reissued
	350,889 shares of Common Stock, net of 111,722 shares purchased and reissued
(15)	Redemption and purchase of 2,107,247 shares of Preferred Stock
	Issuance of Common Stock in exchange for debentures (1,919,311 shares)
	Deferred foreign currency translation adjustments: Translation adjustments
	Income tax adjustments
	Sale of foreign investments
	Net income
	Dividends on:
	Common Stock (\$2.40 per share) Preferred Stock
\$1,999	Balance December 31, 1982
	Issued on conversion of convertible debentures (89,456 shares)
	Issued on conversion of 3,524,735 shares of Preferred Stock (4,558,414 shares)
	Issued under employee incentive plans, and related tax benefit: 69,015 shares of Preferred Stock, net of 6,377 shares purchased and reissued
	925,121 shares of Common Stock, net of 132,999 shares purchased and reissued
(30)	Redemption and purchase of 30,464 shares of Preferred Stock
	Deferred foreign currency translation adjustments:
	Translation adjustments
	Income tax adjustments Sale of foreign investments
	Net income
	Dividends on:
	Common Stock (\$2.55 per share) Preferred Stock
\$1,969	Balance December 31, 1983
	•

In Thousands of Dollars

Retained Earnings	Deferred Translation Adjustments	Common Stock	\$8.00 Preferred Stock	\$7.32 Preferred Stock	\$3.875 Preferred Stock	\$2.55 Preferred Stock
\$1,201,646	\$ —	\$ 678,591	\$16,556	\$ 95,290	\$187,643	\$551,657
		103,475	(4,549)	(90,973)	(8,061)	2,564 (30)
(10)		10.100		152	32	3,401
(2,104) 355		18,189		(4,469)		
		258,474				
	(6,024) (50,911) (3,112)					
457,686						
(118,136) (76,835)						
\$1,462,602	\$ (60,047)	\$1,058,729	\$12,007	\$ —	\$179,614	\$557,592
		3,636	(2,057)		(1,577)	911 (8)
(000)		10.054			59	1,548
(830) (957)		16,054			(13,280)	(39,034)
		65,562				
	(94,252) (3,507) 140					
533,721						
(127,265) (69,570)						
\$1,797,701	\$ (157,666)	\$1,143,981	\$ 9,950	\$ —	\$164,816	\$521,009
		167,796	(4,270)		(163,400)	2,535 (143)
(* 000)		12.202			1	1,228
(1,820) (156)		42,203			(1,417)	
	(36,624) (6,889) 1,843					
509,173						
(141,241) (66,824)						
\$2,096,833	\$(199,336)	\$1,353,980	\$ 5,680	\$ —	\$ —	\$524,629

Notes to Financial Statements

Note 1

<u>Summary of Accounting Principles:</u> The consolidated financial statements include the accounts of the Corporation and its domestic and international subsidiaries except for the unconsolidated finance and real estate subsidiaries which are accounted for under the equity method. International operating subsidiaries are included generally on the basis of fiscal years ending November 30.

Sales under government and commercial fixed-price contracts and government fixed-price-incentive contracts are recorded at the time deliveries are made. Sales under cost-reimbursement contracts are recorded as work is performed and billed. Sales under elevator and escalator installation and modernization contracts are accounted for under the percentage of completion method. Service contract revenues are recorded as sales when earned.

Inventories and contracts in progress are stated at the lower of cost or estimated realizable value. Inventories consist largely of raw materials and work in process. Materials in excess of requirements for contracts and orders currently in effect or anticipated have been eliminated. A considerable portion of the inventories is based on cost standards which are adjusted to reflect approximate current costs. The remainder of the inventories is stated either at average cost or at actual cost accumulated against specific contracts or orders or, in the case of a substantial portion of inventories in the building systems and industrial products businesses, at last-in, first-out (LIFO) cost. Manufacturing tooling costs are charged to inventories or to fixed assets depending upon their nature, general applicability and useful lives. Tooling costs included in inventory are charged to cost of sales based on usage, generally within two years after they enter productive use. All other manufacturing costs are allocated to current production; no such costs are deferred and assigned to future production.

Contracts in progress relate to elevator and escalator contracts and include standard cost of manufactured components, accumulated installation cost, and estimated earnings on uncompleted contracts.

Prospective losses, if any, on contracts are provided for when the losses become anticipated. Loss provisions are based upon any anticipated excess of inventoriable manufacturing or engineering cost over the selling price of the contract. Fleet introductory assistance allowances to commercial airline customers for new engine models and new engine applications are similarly charged off at the time firm orders are received from customers, if and to the extent that such allowances are in excess of expected gross margins of the products contemplated by the specific order.

Research and development costs not specifically covered by contracts are charged against income as incurred. General and administrative expenses also are charged against income as incurred. Costs pertaining to fulfillment of the Corporation's warranty and service policies and product guarantees are estimated on the basis of past experience and current product performance and, where believed to be significant and reasonably predictable in amount, are accrued at the time products are sold.

Current assets and current liabilities include items expected to be, or which may be, realized or liquidated during the next year.

Provisions for depreciation of plant and equipment related to the Corporation's aerospace operations have generally been made on accelerated methods. Provisions for depreciation of other plant and equipment have generally been made on the straight-line method. Wherever possible, accelerated methods are used for income tax purposes. Generally, estimated useful lives used for financial statement depreciation purposes range from 30 to 50 years for buildings and improvements, from 8 to 20 years for machinery and equipment, and from 5 to 10 years for office equipment. Improvements to leased property are amortized over the life of the lease.

Costs in excess of values assigned to the underlying net assets of acquired companies are included in deferred charges and are generally being amortized over 25 years.

Provisions for income taxes are based upon income and expenses recorded in accordance with the Corporation's regular accounting practices, and as shown in the financial statements. The income tax effects of differences in the time when income and expenses are reflected in accordance with such regular accounting practices and the time they are recognized for income tax purposes are shown in the balance sheet as deferred income taxes.

Investment tax credits are taken into income by reducing the provision for federal income taxes in the year the related assets are placed in service (the flow-through method). Prior to 1982, investment tax credits were deferred and amortized over the estimated useful lives of the related assets (the deferral method). See Note 2.

Earnings per share computations are based on the average number of shares of Common Stock outstanding during the year. Fully diluted earnings per share reflect the maximum dilution of per share earnings which would have occurred if all of the dilutive convertible securities of the Corporation had been converted on the dates of issue. Such earnings reflect the elimination of Convertible Subordinated Debenture interest, less applicable federal income taxes, and dividends on Convertible Preferred Stock.

Note 2

Accounting Change: Effective January 1, 1982, the Corporation changed its method of accounting for investment tax credits from the deferral method to the flow-through method in order to achieve greater comparability with the accounting practices of most other industrial concerns and, in the opinion of the Corporation, to more accurately reflect the economic impact of investment decisions on reported earnings. Under the flow-through method, the provision for federal income taxes is reduced by investment tax credits in the year the related assets are placed in service, rather than deferring such investment tax credits and amortizing them over the estimated useful lives of the related assets.

The effect of the change in 1982 was to increase net income by \$81,425,000 or \$1.53 per share on a primary basis and \$1.22 per share on a fully diluted basis, of which \$66,621,000 (\$1.25 primary earnings per share and \$1.00 fully diluted earnings per share) represents the cumulative effect of investment tax credits through 1981 and \$14,804,000 (\$.28 primary earnings per share and \$.22 fully diluted earnings per share) represents the net effect of 1982 investment tax credits. Pro forma earnings and related per share amounts as if the flow-through method had been adopted retroactively are included in the Consolidated Statement of Income.

Note 3

Supplementary Earnings Per Share: During 1983, 4,336,158 shares of Common Stock were issued upon conversion of 3,469,448 shares of \$3.875 Preferred Stock. Had the conversion of these securities, as well as conversions of these securities which occurred in 1982 and 1981, occurred on January 1, 1981, primary earnings per share would have been \$7.63 for 1983. For 1982, the primary earnings per share based on income before extraordinary item and cumulative effect of accounting change would have been \$6.45 and the primary earnings per share based on net income would have been \$8.31. The primary earnings per share for 1981 would have been \$7.33.

Note 4

Extraordinary Gain: In June 1982 the Corporation exchanged 1,919,311 shares of Common Stock valued at \$65,611,000 and cash of \$63,039,000, for \$133,400,000 principal amount of its outstanding 9%% debentures due January 15, 2004, \$24,580,000 principal amount of 9%% debentures due April 15, 2000, \$5,906,000 principal amount of 8%% debentures due 1996 and \$1,150,000 principal amount of 7%% debentures due 1998. The exchange resulted in an extraordinary gain, which is not subject to income taxes, of \$40,226,000 (\$.76 primary earnings per share and \$60 fully diluted earnings per share) after deducting unamortized debt discount and other related expenses. The dilutive effect of the issuance of the shares of Common Stock was not material in amount.

Note 5

Interest Expense: During 1983 the Corporation and its consolidated subsidiaries incurred interest cost of \$243,224,000 (\$287,902,000 in 1982 and \$286,989,000 in 1981) and, pursuant to Financial Accounting Standard No. 34, "Capitalization of Interest Cost," capitalized \$34,651,000 (\$37,016,000 in 1982 and \$42,150,000 in 1981) of the total to be depreciated over the lives of the related fixed assets.

Note 6

International Operations: A substantial portion of the Corporation's revenues and assets relate to international operations. The Corporation has significant manufacturing facilities in Canada, France, Germany, Italy, Switzerland, the United Kingdom, Spain and Japan and operations of lesser size in a number of other countries. The investment (identifiable assets) in any single country other than the United States does not exceed 4% of the Corporation's total identifiable assets, except for investments in Canada which amounted to 6% of total identifiable assets at December 31, 1983. Amounts included in the accompanying consolidated financial statements associated with operations outside the United States consist of the following:

In Thousands of Dollars	1983	1982	1981
Sales	\$3,026,844	\$2,888,962	\$3,019,024
Net income Assets	\$ 132,413 \$2,515,859	\$ 113,572 \$2,427,613	\$ 189,707 \$2,150,085
Liabilities	\$1,617,790	\$1,513,858	\$1,451,265
Minority interests	\$ 89,288	\$ 68,589	\$ 79,665

Pursuant to Financial Accounting Standard No. 52, which was adopted by the Corporation effective January 1, 1981, the financial position and results of operations of substantially all of the Corporation's significant foreign subsidiaries are measured using local currency as the functional currency. Assets and liabilities of such subsidiaries have been translated at current exchange rates, and related revenues and expenses have been translated at average-for-the-year exchange rates. The aggregate effect of translation adjustments (losses) so calculated, including the opening period adjustment in 1981, together with net gains from hedging exposed net asset positions less related tax effects, is being deferred as a separate component of Shareowners' Equity, until there is a sale or liquidation of the underlying foreign investments. At December 31, 1983, \$199,336,000 had been so deferred (\$157,666,000 at December 31, 1982 and \$60,047,000 at December 31, 1981) as a result of the strengthening during 1983, 1982 and 1981 of the U.S. dollar against most major foreign currencies, particularly the French franc, Spanish peseta, Canadian dollar, Dutch guilder, Italian lira, Swiss franc, Australian dollar and

Venezuelan bolivar. The Corporation has no present plans for sale or liquidation of significant investments to which these deferrals relate.

The economies of Brazil and, beginning in 1982, Mexico have been determined to be highly inflationary. Accordingly, under FAS No. 52, the U.S. dollar is deemed to be the functional currency of subsidiaries in those countries, and all translation gains and losses are taken into income.

After reflecting the adoption of FAS No. 52, earnings were charged with foreign exchange losses, including translation losses of operations in highly inflationary economies, of \$6,163,000, \$7,004,000 and \$12,145,000 in 1983, 1982 and 1981, respectively.

Note 7

Accounts Receivable: Allowances for doubtful accounts of \$64,687,000 and \$68,456,000 have been applied as a reduction of current accounts receivable at December 31, 1983 and 1982, respectively.

Current accounts receivable include amounts which represent retainage under contract provisions and amounts which are not presently billable because of lack of funding or final prices or contractual documents under government contracts or for other reasons. These items are not material in amount and are expected to be collected in the normal course of business.

Note 8

Inventories and Contracts in Progress: Inventories and contracts in progress at December 31, 1983 consisted of inventories of \$4,116,527,000 (\$4,160,543,000 at December 31, 1982) and elevator and escalator contracts in progress of \$790,700,000 (\$808,045,000 at December 31, 1982).

The principal elements of cost included in inventories are materials, purchased components, direct labor and manufacturing overhead (engineering overhead in the case of engineering contracts). Tooling and other costs are an insignificant portion of inventories.

A substantial portion of the Corporation's inventories in its building systems and industrial products businesses is valued under the LIFO method. If these inventories had been valued at the lower of replacement value or cost under the first-in, first-out method, they would have been higher by \$198,440,000 at December 31, 1983 (\$186,138,000 at December 31, 1982).

The book basis of LIFO inventories exceeded the tax basis of such inventories by approximately \$70,898,000 at December 31, 1983 (\$73,754,000 at December 31, 1982). In 1983 and 1982, income before income taxes on a LIFO book basis was approximately \$2,856,000 and \$3,150,000, respectively, less than that on a tax basis. These differences result from the assignment of fair value to inventories acquired in a business acquisition which has been accounted for as a purchase transaction.

The methods of accounting followed by the Corporation do not permit classification of inventories by categories of finished goods, work in process and raw materials. The Corporation's sales contracts in many cases are long-term contracts expected to be performed over periods exceeding twelve months. Approximately 73 percent (76 percent at December 31, 1982) of total inventories and contracts in progress have been acquired

or manufactured under such long-term contracts. It is impracticable for the Corporation to determine the amounts of inventory scheduled for delivery under long-term contracts within the next twelve months.

Progress payments, secured by lien, on United States Government contracts, and billings on contracts in progress amounted to \$1,043,317,000 (\$1,197,963,000 at December 31, 1982) and \$871,265,000 (\$904,633,000 at December 31, 1982), respectively, at December 31, 1983.

Note 9 *Unconsolidated Subsidiaries and Other Investments:*Investments consist of the following:

In Thousands of Dollars	1983	1982
Finance subsidiaries Real estate subsidiary	\$225,723 24.117	\$199,586 25,477
Other companies	86,525	73,373
	\$336,365	\$298,436

Finance Subsidiaries:

The Corporation's investments in its finance subidiaries — UT Credit Corporation (UT Credit), Carrier Distribution Credit Corporation (CDCC) and UT Communications Credit Corporation (UTCCC) — are carried at underlying equity, as shown in the finance subsidiaries' financial statements, and advances. The Corporation's equity in the net income of the finance subsidiaries attributable to external sources has been included in consolidated other income. The portion of the finance subsidiaries' income before taxes relating to intercompany financing and income maintenance fees has been eliminated in the consolidated financial statements.

The combined, condensed financial data set forth below have been summarized from the audited financial statements of UT Credit, CDCC, and UTCCC:

In Thousands of Dollars	1983	1982	1981
Income:			
Interest, lease and other Intercompany interest and income	\$ 58,960	\$36,547	\$ 31,851
maintenance fees	48,799	63,089	69,946
	\$107,759	\$99,636	\$101,797
Expenses:			<u> </u>
Interest	\$ 61,856	\$51,554	\$ 58,897
Depreciation	3,166		
Administrative	3,276	3,549	5,732
Income taxes	12,664	18,689	17,586
	\$ 80,962	\$73,792	\$ 82,215
Cumulative effect of change			
in accounting principle	\$ —	\$ 3,543	\$
Net Income	\$ 26,797	\$29,387	\$ 19,582

In Thousands of Dollars	1983	1982
Assets:	-	
Cash and short-term cash		
investments	\$ 36,371	\$ 912
Accounts and notes receivable	664,243	616,663
Financing leases receivable, net of		
unearned income	93,239	78,853
Aircraft under operating leases		
(net of accumulated depreciation		
of \$3,166,000)	75,324	
Other	$\underline{27,776}$	23,458
	\$896,953	\$719,886
Liabilities and Shareholder's		.,
Equity:		
Commercial paper and other short-		
term borrowings	\$223,843	\$230,143
Accrued liabilities	27,921	17,474
Long-term debt of UT Credit:		
85% Notes due 1986	50,000	50,000
1034% Subordinated Notes due	7 0.000	
1993	50,000	
11¼% Notes due 1993 8¼% Notes due 2002	100,000	
8.85% Debentures due 2003	$68,460 \\ 75,000$	75,000
9% Subordinated Debentures	75,000	75,000
due 2003	25,000	25,000
Intercompany loans	54,990	54,990
Long-term debt of CDCC:	04,000	04,000
8%% Senior Subordinated Notes		
due 1984-1992	9,000	10,000
Deferred income taxes	41,108	37,445
Capital stock	45,001	45,001
Retained earnings	126,630	99,833
	\$896,953	\$719,886

Scheduled maturities of the subsidiaries' long-term notes and leases receivable for the next five years are: \$38,083,000 in 1984; \$39,663,000 in 1985; \$43,073,000 in 1986; \$38,608,000 in 1987; and \$39,749,000 in 1988.

The finance subsidiaries are engaged in the business of financing the purchases of products of the Corporation and its subsidiaries and, in the case of UT Credit, products of other companies incorporating United Technologies' products. The subsidiaries provide financing through acquisition of accounts and notes receivable, leases and interests therein. Equipment financed for customers includes, principally, Pratt & Whitney Aircraft-powered commercial aircraft, Carrier products, Sikorsky helicopters and Building Systems communication equipment. UT Credit and CDCC also purchase, on a discounted basis from the Corporation, unsecured short-term receivables from airframe manufacturers and air-conditioning equipment distributors with maturities of up to six months. At December 31, 1983, the amount of such short-term receivables was approximately \$271,060,000, and the average investment in these receivables was \$274,102,000 in 1983.

In the first quarter of 1982, and effective January 1, 1982, the finance subsidiaries changed their method of accounting for investment tax credits from the deferral method to the flow-through method, consistent with the accounting change made by the Corporation. The effect of the change in 1982 was to increase net income by \$5,981,000, of which \$3,543,000 represented the cumulative effect of prior years' investment tax credits and \$2,438,000 represented the net effect of 1982 investment tax credits.

Operating agreements with UT Credit and CDCC provide that income maintenance payments will be made to the subsidiaries to the extent necessary so that the subsidiaries' earnings available for fixed charges shall not be less than one and one-half times such fixed charges. In addition, the Corporation is currently obligated by agreements to purchase receivables from UT Credit and CDCC in the event of default by the obligor and to purchase equipment held for lease under operating leases in the event that UT Credit is unable to lease such equipment on reasonable terms. At December 31, 1983, \$774,970,000 of the receivables and aircraft under operating leases included in the combined, condensed financial data of the finance subsidiaries were subject to such purchase terms.

As of December 31, 1983, the finance subsidiaries had outstanding commitments for financing of approximately \$425,000,000. The commitments mainly relate to aircraft engine financing, of which \$225,000,000 is subject to future aircraft orders to be placed by the customers. Of the total amount, \$125,000,000 may be required to be disbursed in 1984, \$75,000,000 in 1985 and \$225,000,000 in 1986 and later years.

During the fourth quarter of 1982, UT Credit filed a Registration Statement with the Securities and Exchange Commission covering \$300 million of long-term debt securities to be issued at such times as market conditions are considered favorable. UT Credit issued in January 1983, \$100 million of 10 year notes at an interest rate of 11¼% and in April 1983, \$50 million of subordinated 10 year notes at an interest rate of 10¾% under such Registration Statement. The proceeds were used principally to reduce short-term borrowings. The proceeds of the remaining \$150 million, if issued, will be used principally to reduce short-term borrowings and/or to meet financing commitments discussed above.

Real Estate Subsidiary:

In 1982, the Corporation formed an unconsolidated real estate subsidiary, which in December 1982 purchased an office building in Hartford, Connecticut. Approximately 20% of the office building is utilized as the headquarters of the Corporation. The subsidiary's principal asset is the office building,

at a cost of \$51 million. Its liabilities consist principally of an 8%% mortgage of \$26 million payable in installments to 1999 (which is without recourse to the Corporation), and a non-interest-bearing intercompany account payable to the Corporation of \$24 million. The real estate subsidiary holds a 99 year lease on the land underlying the building, at an initial rental of \$1 million per year, which is adjustable annually based on certain factors and within certain limitations. The subsidiary also has certain rights and obligations (which are guaranteed by the Corporation) concerning future purchase of the land.

The results of operations were not significant in the real estate subsidiary in 1983 and 1982.

Note 10

<u>Deferred Charges</u>: Included in deferred charges are costs in excess of the net assets of acquired companies (goodwill), net of amortization as follows:

In Thousands of Dollars	1983	1982
Goodwill Accumulated amortization	\$647,808 (112,404)	\$627,593 (95,165)
	\$535,404	\$532,428

During 1983 and 1982, net additions of \$20,215,000 and net reductions of \$7,432,000, respectively, were recorded, representing business acquisitions and dispositions and net adjustments on completion of accounting studies to assign values to the net assets of acquired companies.

Note 11

ShortTerm Borrowings and Lines of Credit: The following summarizes the short-term borrowings of the Corporation and its consolidated subsidiaries as of December 31, 1983 and 1982:

In Thousands of Dollars	1983	1982
Bank borrowings Commercial paper	\$249,244 148,905	\$217,371 232,020
1 P	\$398,149	\$449,391

At December 31, 1983, the Corporation had credit commitments by banks totaling \$2,000,000,000. These comprised \$1,000,000,000 of formal lines of credit (available on an either/or basis to the Corporation and UT Credit, and up to \$500,000,000 is available to CDCC on an informal basis) and \$1,000,000,000 under a Revolving Credit Agreement (available on an either/or basis to the Corporation and UT Credit). The bank lines provide for short-term borrowings, at interest rates up to prime rates and for a fee of 4% per year, through February 29, 1984 and extension of the lines beyond that date is presently under negotiation. The Revolving Credit Agreement provides for borrowings through September 30, 1990, at interest rates up to 18% over the prime rate and for a commitment fee of up to 12% per year on undrawn amounts. At the end of 1983, the major portion of the bank borrowings shown in the table above were borrowings by non-U.S. subsidiaries, and none were under the formal bank lines. The only borrowings under such lines were by UT Credit, in the amount of \$2,700,000. There were no borrowings under the Revolving Credit Agreement. The unused bank lines and the Revolving Credit Agreement serve as informal backup facilities for commercial paper.

Under informal arrangements, the Corporation maintains compensating balances with banks which, although they fluctuate from time to time, generally range from \$40 to \$45 million.

Note 12

<u>Taxes on Income</u>: The provision for income taxes for each of the three years ended December 31, 1983 comprised the following:

In Thousands of Dollars	1983	1982	1981
Currently payable:			
United States			
Federal	\$127,817	\$ 78,344	\$149,891
State	30,183	50,740	30,457
Foreign	125,711	142,505	146,743
	\$283,711	\$271,589	\$327,091
Deferred:			
United States			
Federal	\$ 38,421	\$ 59,025	\$ 38,697
State	8,324	(6,941)	16,274
Foreign	4,648	(5,429)	3,867
	\$ 51,393	\$ 46,655	\$ 58,838
Investment tax credit			
deferred, net	\$	\$ —	\$ 16,762
	\$335,104	\$318,244	\$402,691

As discussed in Note 2, the Corporation adopted the flow-through method of accounting for investment tax credits effective January 1, 1982. The current tax provisions for 1983 and 1982 have been reduced by \$23,065,000 and \$27,044,000, respectively, for the effect of investment tax credits generated in 1983 and 1982.

Deferred income taxes represent the tax effects of transactions which are reported in different periods for financial and tax reporting purposes. Changes in deferred federal income taxes shown above include the income tax effects of:

In Thousands of Dollars	1983	1982	1981
Use of completed-contract method for reporting taxable income on long-term			
manufacturing contracts Tax depreciation in excess	\$ (8,528)	\$18,903	\$(17,792)
of financial statement depreciation Capitalization of interest	29,404	23,580	18,286
cost, less related depreciation Adjustments of assets and liabilities for tax purposes, which tend to recur annually:	9,443	14,873	17,286
Adjustment of inventories to tax basis Expenditures (provisions) for warranty and correction of product	(3,944)	(6,365)	221
deficiencies, tax deductible when paid Insurance and employee benefits deductible on different bases for	(5,382)	2,747	6,818
book and tax purposes Customer allowances, tax deductible when	(10,759)	1,167	(2,948
paid or applied Other items	38,293 (10,106)	974 3,146	25,663 (8,837
	\$ 38,421	\$59,025	\$ 38,697

The sources of income before income taxes for each of the three years ended December 31, 1983 were:

In Thousands of Dollars	1983	1982	1981
United States Foreign	\$600,284 258,957	\$502,981 254,743	\$535,374 340,041
	\$859,241	\$757,724	\$875,415

Deferred income taxes generally have not been provided on undistributed earnings of international subsidiaries and of the Corporation's export subsidiaries which are Domestic International Sales Corporations (DISCs), amounting to \$614,605,000, included in consolidated retained earnings at December 31, 1983. A substantial portion of the undistributed earnings of the international subsidiaries has been reinvested and the Corporation believes that income taxes otherwise payable upon repatriation of earnings not reinvested would be largely offset by available foreign tax credits. In the case of DISCs, the Corporation has reduced its income tax provisions to the extent that management believes that export earnings can continue to be reinvested in export-related assets and the taxes postponed, as provided by this legislation.

Differences between effective income tax rates and the statutory U.S. federal income tax rates are as follows:

	1983	1982	1981
Statutory U.S. federal income tax	40.00	46.007	40.007
rates	46.0%	46.0%	46.0%
State and local income taxes, net of	0.4	0.1	9.0
federal tax benefit	2.4	3.1	2.9
Research and experimentation credit	(3.8)	(2.0)	(0.6)
Investment tax credit	(2.7)	(3.6)	_
Amortization of investment tax credit			(1.8)
Varying tax rates of consolidated subsidiaries (including DISC) Foreign currency balance sheet	(3.8)	(4.2)	(3.1)
translation adjustments, without tax effect	0.2	0.7	0.5
Amortization of excess purchase cost and other purchase accounting adjustments, without tax effect	2.0	2.5	2.1
Equity in earnings of unconsolidated subsidiaries	(1.0)	(1.1)	(0.5)
Other	(0.3)	0.6	0.5
Effective income tax rates	39.0%	42.0%	46.0%

Note 13								
Long-Term	Debt:	Long-term	debt	consists	of	the	following	ζ:

In Thousands of Dollars	1983	1982
11.10% Notes due January 10,		
1984-1985	\$ 66,700	\$100,000
9% Notes due April 15, 1985	100,000	100,000
9.45% Notes due January 15, 1989	100,000	100,000
9%% Sinking Fund Debentures due		
April 15, 2000	75,420	75,420
9%% Sinking Fund Debentures due		
January 15, 2004	66,600	66,600
114% Sinking Fund Debentures due		
November 15, 2012	100,000	100,000
Carrier 734% Debentures due 1998	36,996	39,991
United Technologies Finance		
(Netherlands Antilles) N.V.:		
61/2% Swiss Franc Notes due		
September 28, 1987	34,404	37,407
12%% Guaranteed Notes due		
October 15, 1989	100,000	100,000
7%% Deutsche Mark Bearer		
Bonds due 1992	36,758	41,990
Other, average interest rate 8.9%,		
due 1984 to 2009	212,255	220,925
	\$929,133	\$982,333
Less - current portion	60,165	55,153
-	\$868,968	\$927,180

In 1982 the Corporation filed a Registration Statement with the Securities and Exchange Commission covering up to \$300,000,000 of long-term debt securities, to be issued at such times as market conditions are considered favorable. In November 1982, the Corporation issued \$100,000,000 of 114% Sinking Fund Debentures due November 15, 2012 pursuant to that Registration Statement. It is intended that proceeds from the remaining \$200,000,000 of debt, if and when issued, will be used for general corporate purposes, including the reduction of short-term borrowings, if applicable.

Required payments on long-term debt for the next five years are \$60,165,000 in 1984, \$162,129,000 in 1985, \$30,225,000 in 1986, \$70,604,000 in 1987, and \$17,437,000 in 1988.

Note 14

Shareowners' Equity: Preferred Stock consists of the following:

In Thousands of Dollars	1983	1982
\$4.50 Cumulative Dividend Preferred Stock (Outstanding — 19,694 and 19,994 shares, respectively) (Liquidating preference — \$105 per share, aggregating \$2,068,000) \$2.55 Cumulative Dividend Convertible Preferred Stock (Outstanding — 20,847,934 and 20,695,238 shares, respectively)	\$ 1,969	\$ 1,999
(Liquidating preference — \$25 per share, aggregating \$521,198,000) \$3.875 Cumulative Dividend	524,629	521,009
Convertible Preferred Stock \$8.00 Cumulative Dividend Convertible Preferred Stock (Outstanding — 65,915 and 115,477 shares, respectively) (Liquidating preference — \$100	_	164,816
per share, aggregating \$6,592,000)	5,680	9,950
	\$532,278	\$697,774

The \$4.50 Preferred Stock is redeemable at the option of the Corporation at \$105.00 per share plus accrued and unpaid dividends. The \$2.55 Convertible Preferred Stock will be redeemable at the option of the Corporation on and after September 1, 1986, initially at \$29.00 per share, and thereafter at decreasing amounts to \$25.00 per share on September 1, 1994, plus accrued and unpaid dividends. Each share is convertible at the option of the holder at any time into .3928 share of Common Stock, plus accrued and unpaid dividends. The \$8.00 Preferred Stock will be redeemable at the option of the Corporation on and after April 1, 1984 at \$100.00 per share plus accrued and unpaid dividends. Each share is convertible at the option of the holder at any time into 4.44 shares of Common Stock.

In November 1983 a redemption notice was given to holders of the \$3.875 Convertible Preferred Stock at \$52.50 per share. Substantially all outstanding shares were converted into Common Stock prior to the redemption date. In December 1983, the Corporation announced its intention to call for redemption the \$8.00 Convertible Preferred Stock on April 2, 1984.

In January 1982, the Corporation announced plans to reacquire, for cash, up to \$100,000,000 of its Convertible Preferred Stock. The Corporation reacquired 282,000 shares of the \$3.875 Preferred Stock and 1,825,100 shares of the \$2.55 Preferred Stock during 1982 for a total purchase of \$53,271,000. The shares of Preferred Stock reacquired would have been convertible into 1,058,956 shares of Common Stock, at the dates of purchase.

At December 31, 1983, 33,235 and 9,466,660 shares of Preferred Stock and Common Stock, respectively, were reserved for issuance under various employee incentive plans (Note 15). In addition, 91,438 shares of Preferred Stock were reserved for issuance on conversion of certain debentures of Carrier Corporation.

The terms of the indentures relating to certain issues of long-term debt include provisions intended to restrict, under certain conditions, the availability of retained earnings for payment of dividends on the Common Stock. At December 31, 1983, all of the Corporation's retained earnings were free of such restrictions.

At December 31, 1983, undistributed earnings of \$114,682,000 of the Corporation's unconsolidated finance subsidiaries were included in retained earnings.

Employee Benefit Plans: The Corporation's general policy is to fund current pension costs as accrued. Pension costs were \$215,516,000 in 1983, \$200,106,000 in 1982 and \$199,892,000 in 1981. These amounts included amortization of prior service costs over periods ranging from 14 years for the principal plans to 30 years for certain of the subsidiaries' plans. Changes in 1982 in the actuarial assumptions used to determine pension costs for several plans, together with increases in plan benefits, had the net effect of reducing pension costs by approximately \$25,726,000. A comparison of accumulated plan benefits and plan net assets for the defined benefit plans of the Corporation and its subsidiaries, generally as of January 1, is shown below:

In Thousands of Dollars	1983	1982
Actuarial present value of accumulated plan benefits:		
Vested	\$2,193,057	\$1,972,099
Nonvested	158,877	139,499
	\$2,351,934	\$2,111,598
Net assets available for		
benefits	\$3,255,195	\$2,855,849

The assumed rates of return used in determining the actuarial present value of accumulated plan benefits, generally the rates published by the Pension Benefit Guaranty Corporation as of the dates of valuation, were 7.85% and 7.75%, on a weighted average basis, for 1983 and 1982, respectively. Pension plans of the Corporation's international subsidiaries generally do not determine the actuarial value of accumulated benefits and the value of net assets on the basis shown above. For these plans, unfunded vested benefits as of December 31, 1983 and 1982 were \$20,137,000 and \$19,772,000, respectively. Liabilities under unfunded pension plans of certain international subsidiaries and for employee severance benefits, including those accruing to employees under foreign government regulations, are included in other long-term liabilities in the

accompanying balance sheet.

At December 31, 1983, 4,009,806 shares of Common Stock were reserved for issuance under the Corporation's 1974 and 1976 Stock Option Plans and 1979 Long Term Incentive Plan. Option prices under these Plans approximate 100% of the market price of the Common Stock on the dates the options are issued. Effective February 5, 1982, the Board of Directors, upon shareowners' approval, authorized the cancellation of outstanding options for 1,922,633 shares of Common Stock granted under the 1976 Stock Option Plan and the 1979 Long Term Incentive Plan in 1980 and 1981 at option prices averaging \$51.57, and their reissue at a price of \$35.875, which represented fair market value as of that date. The 1979 Plan provides for the granting of Stock Appreciation Rights linked with stock options granted under either the 1979 Plan or the 1976 Plan. The exercise of either a Stock Appreciation Right or a stock option automatically cancels the connected option or right.

The 1979 Plan also provides for the granting of Performance Units. The units are payable at the end of each award period, which may not exceed 5 years, and then only if certain minimum Corporate earnings targets are met. In certain instances, the exercise of either a stock option or a Performance Unit automatically cancels the related unit or option.

A summary of the transactions under all Plans for the three years ended December 31, 1983 is set forth on the following page.

	Stoo	Stock Options		preciation Rights	Performance Units
	Shares	Average Price	Rights	Average Price	Units
Outstanding –					
December 31, 1980	3,357,369	\$39.73	283,591	\$42.55	718,839
Granted	1,163,018	\$53.54	115,502	\$50.36	458,660
Exercised	(498,268)	\$34.40	(45,500)	\$40.77	_
Cancelled	(366,141)	\$44.30	(104,660)	\$42.66	(82,838)
Outstanding -					
December 31, 1981	3,655,978	\$44.39	248,933	\$46.46	1,094,661
Granted	1,294,677	\$35.94	219,568	\$35.88	472,634
Exercised	(422,135)	\$33.84	(40,588)	\$37.62	(220,614)
Cancelled	(2,259,423)	\$49.16	(22,783)	\$46.55	(62,829)
Reissued	1,798,665	\$35.88		· —	
Outstanding -					
December 31, 1982	4,067,762	\$36.37	405,130	\$41.60	1,283,852
Granted	1,260,144	\$61.81	338,439	\$59.13	507,596
Exercised	(1,042,706)	\$35.74	(149,333)	\$41.16	(166,662)
Cancelled	(275,394)	\$43.90	(53,875)	\$46.48	(308,880)
Outstanding —					
December 31, 1983	4,009,806	\$44.02	540,361	\$52.22	1,315,906

At December 31, 1983, stock options for 716,000 shares of Common Stock were exercisable at an average price of \$34.92 per share. The number of options available for grant under all of the Plans at December 31, 1983 was 5,376,704 (1,278,985 at December 31, 1982).

There were also outstanding options at December 31, 1983 under prior Carrier plans for 33,235 shares of \$2.55 Preferred Stock at an average price of \$17.31. All of these shares were exercisable. During the year options for 75,342 shares were exercised at an average price of \$17.36 and options for 1,103 shares were cancelled at an average price of \$18.07.

In addition, there were outstanding options for \$3.875 Preferred Stock under prior plans of another acquired company. During the year options for 50 shares of such stock at an average price of \$24.05 were exercised and 500 shares at an average price of \$24.05 were cancelled. On December 15, 1983 options for 3,075 shares of \$3.875 Preferred Stock were converted into options for 3,843 shares of Common Stock. Subsequent to such conversion, options for 631 shares of Common Stock were exercised at an average price of \$11.44. At December 31, 1983 there were outstanding options for 3,212 shares of Common Stock at an average price of \$11.67 under such plans.

For 1983, \$35,205,000 (\$44,197,000 in 1982 and \$47,016,000 in 1981) was charged to income with respect to employee incentive plans of the Corporation and certain of its subsidiaries, of which \$31,833,000 (\$30,358,000 in 1982 and \$27,912,000 in 1981) was authorized for distribution among officers and employees by the Board of Directors under the Corporation's principal Incentive Compensation Plan, and the remainder was accrued under the 1979 Long-Term Incentive Plan and plans of acquired companies.

The Corporation and a number of its subsidiaries have savings plans in which a portion of employee contributions is matched by the employer. The matching contributions totaled \$46,964,000 in 1983 (\$39,024,000 in 1982 and \$33,943,000 in 1981).

Note 16

Commitments and Contingent Liabilities: The Corporation is engaged in various legal proceedings and, at December 31, 1983, was contingently liable in the amount of approximately \$40,000,000 representing discounted accounts and notes receivable and participations in guarantees of aircraft financing arrangements. Management does not expect that amounts, if any, which may be required to be paid by reason of such litigation, discounted receivables or guarantees will be of material importance to the financial condition or earnings of the Corporation.

The Corporation extends performance and operating cost guarantees, which are beyond its normal warranty and service policies, for extended periods on some of its products,

particularly commercial aircraft engines. Liability under such guarantees is contingent upon future product performance and durability. Management has no present reason to believe that such guarantees will result in material losses to the Corporation.

At December 31, 1983 the Corporation had commitments of \$221,396,000 on purchase orders issued for acquisition of fixed assets.

The Corporation and its subsidiaries occupy space and use certain equipment under lease arrangements. The Corporation is not a lessee under any capital leases of significance. Rent expense in 1983, 1982 and 1981 under such arrangements totaled \$227,536,000, \$202,530,000 and \$177,799,000, respectively. Rental commitments at December 31, 1983 under long-term noncancellable operating leases were as follows:

In Thousands of Dollars	Land, Buildings and Office Space	Machinery, Tools and Equipment
1984	\$ 79,350	\$ 87,106
1985	72,920	65,304
1986	64,337	50,644
1987	57,049	21,943
1988	53,809	11,195
After 1988	455,992	13,289
	783,457	249,481
Less:		
Sublease rentals	(79,369)	(41)
	\$704,088	\$249,440

Note 17

Business Segment Financial Data: Business segment information for the three years ended December 31, 1983, required by Financial Accounting Standard No. 14, appears in the Consolidated Summary of Business Segment Financial Data on pages 39 through 41.

Note 18

Changing Prices (Unaudited): The inflation data presented below for 1983 and 1982 has been provided in accordance with Financial Accounting Standard No. 33, "Financial Reporting and Changing Prices," as amended by FAS No. 70, "Financial Reporting and Changing Prices: Foreign Currency Translation." The inflation data for 1981 also has been restated in accordance with the latter Standard. The inflation data for 1980 and 1979 has been provided as required by FAS No. 33.

The following table summarizes adjustments to net income for 1983 required to be presented by FAS No. 33 as amended:

Net Income, Adjusted for Changing Prices	
In Thousands of Dollars	
Net Income Adjustments for changes in specific prices: Cost of goods and services sold, excluding	\$ 509,000
depreciation Depreciation	(18,000) (45,000)
Adjusted for current cost	\$ 446,000
Gain from decline in purchasing power of net amounts owed	\$ 15,000
Foreign currency translation adjustment	\$ (78,000)
Increase in current cost of inventories and fixed assets held during the year* Increase in general price level Excess of increase in general prices over increase in specific prices	\$ 138,000 188,000 \$ 50,000

*At December 31, 1983, the current cost of inventories and net fixed assets was \$5,108 million and \$3,545 million, respectively.

The inflation adjustments to cost of goods and services sold and depreciation expense, and to net assets at year end as shown on page 38, have been derived by restating historical costs in terms of current costs. Under current costs, historical costs are restated to costs which are current at the balance sheet date or date of sale or use, generally by reference to current manufacturing costs and by application of specific price indices to historical costs. Current cost data is measured after foreign currency translation and based on the U.S. CPI(U) (the translate-restate method).

Certain fixed assets of the Corporation have been depreciated in the historical financial statements under accelerated methods, partially to allow for expected cost increases. To provide the most meaningful basis of adjustments, current cost depreciation has been determined on the straight-line method. Estimates of asset life and related salvage value are consistent with those used in the historical financial statements.

Because a major portion of the Corporation's business is conducted under long-term contracts with customers, selling prices established for product deliveries in future periods have generally reflected estimated costs to be incurred in those future periods. Accordingly, the principal portion of inventories and contracts in progress and cost of goods and services sold included in the Corporation's historical financial statements relating to items which were manufactured or acquired for sale under long-term contract arrangements have not been restated for the effects of changing prices.

As prescribed by FAS No. 33, no adjustments or allocations of the amount of historical income taxes have been made in determining net income adjusted for the effects of changing prices. Because corporate profits are taxed, under the U.S. Internal Revenue Code and in most other countries, on the basis of historical cost results without regard to the inflated cost of replacing corporate assets, the effective income tax

rate is higher on a current cost basis than on a historical cost basis. The result of current tax policies in an inflationary economy is to reduce the funds which would otherwise be available to businesses for replacing, modernizing and expanding capital facilities.

The following five-year summary reflects the adjustments to the 1983 data described above and similar adjustments for 1982, 1981, 1980 and 1979.

Five Year Summary of Selected Financial Data Adjusted for the Effect of Changing Prices (Unaudited)

In Thousands of Dollars (except per share amount	:s)	1983		1982		1981		1980	Pro	1979 Forma +	1979
Sales*	\$14	1,669,000	\$1	13,984,000	\$:	14,946,000	\$:	14,874,000	\$1	4,527,000	\$ 12,405,000
Current Cost Data:											
Income before extraordinary item											
and cumulative effect of											
accounting change	\$	446,000	\$	313,000	\$	374,000	\$	334,000	\$	323,000	\$ 314,000
Per Share of Common Stock:						_		_			
Primary earnings		\$6.81		\$4.54		\$5.86		\$5.50		\$5.03	\$5.73
Fully diluted earnings		\$6.55		\$4.42		\$5.53		\$5.13		\$4.79	\$5.26
Net Assets at Year End	\$ 4	4,841,000	\$	4,542,000	\$	4,670,000	\$	4,464,000			\$ 4,582,000
Increase in Current Costs											
greater than (less than)											
increase in General Prices	\$	(50,000)	\$	13,000	\$	(50,000)	\$	(210,000)			\$ (110,000)
Gain from Decline in Purchasing Power											
of Net Amounts Owed	\$	15,000	\$	18,000	\$	49,000	\$	52,000			\$ 19,000
Foreign Currency Translation											
Adjustment	\$	(78,000)	\$	(139,000)	\$	(77,000)		_			_
Cash Dividends per Common Share*		\$2.55		\$2.47		\$2.63		\$2.66			\$3.02
Market Price per Common Share at											
Year End*		$72\frac{1}{2}$		58%		45%		73%			58%
Average U.S. Consumer Price Index		298.5**		289.1		272.4		246.8			217.4

^{*} As reported for 1983. Except for the 1983 current cost data, all other data in this table have been restated in terms of average 1983 dollars based on general price indices.

The foregoing supplementary information, prepared in accordance with FAS No. 33, as amended by FAS No. 70 for 1983, 1982 and 1981, is viewed as experimental by the Financial Accounting Standards Board. It involves the use of assumptions and estimates and, therefore, should be viewed in that context and not necessarily as a reliable indicator of the effect of inflation on the Corporation's results of operations or its financial position.

^{**} Estimated

⁺Pro forma as if Carrier and Mostek had been wholly-owned subsidiaries on January 1, 1979.

Consolidated Summary of Business Segment Financial Data

Consolidated additions to fixed assets

United Technologies Corporation

Industry Segments	Years Ended December 31,							
In Thousands of Dollars	1983	1982	1981					
Revenues								
Power	\$ 5,146,127	\$ 5,271,606	\$ 5,566,682					
Flight Systems	2,321,859	1,996,776	1,656,749					
Building Systems	3,950,417	3,683,830	3,741,626					
Industrial Products for the Automotive,	2 156 150	9 594 049	0 507 500					
Electronics and Other Industries Other	$3,156,152 \\ 344,689$	$2,524,942 \\ 307,759$	2,587,562 $291,679$					
Eliminations	(249,979)	(207,784)	(176,540					
Consolidated revenue	$\frac{(243,310)}{\$14,669,265}$	\$13,577,129	\$13,667,758					
On anti-un Burga								
Operating Profit Power	¢ 201.259	¢ 490.951	\$ 596,437					
Flight Systems	\$ 301,352 198,231	$\begin{array}{ccc} \$ & 420,351 \\ & 169,256 \end{array}$	\$ 596,437 105,465					
Building Systems	271,994	257,114	285,230					
Industrial Products for the Automotive,	211,001	201,111	200,200					
Electronics and Other Industries	159,612	34,450	34,463					
Other	663	7,465	12,074					
Eliminations	3,645	(3,759)	2,915					
Operating profit	935,497	884,877	1,036,584					
Other income, less other deductions	151,487	139,000	96,839					
Interest expense	(208,573)	(250,886)	(244,839					
General corporate expenses	$\underline{\qquad (19,170)}$	(15,267)	(13,169					
Consolidated income before income taxes	\$ 859,241	\$ 757,724	\$ 875,415					
Identifiable Assets								
Power	\$ 2,829,265	\$ 2,700,740	\$ 2,759,899					
Flight Systems	1,116,265	953,971	822,781					
Building Systems	1,867,680	1,787,050	1,626,007					
Industrial Products for the Automotive, Electronics and Other Industries	9 955 900	9.020.147	1 056 909					
General corporate assets, and other	$2,255,399 \\ 651,450$	$2,032,147 \\ 519,468$	1,956,802 389,614					
Consolidated assets	\$ 8,720,059	\$ 7,993,376	\$ 7,555,103					
Consolidated assets	φ 8,720,000	φ 1,333,370	φ 7,000,100					
Capital Expenditures								
Power	\$ 237,070	\$ 189,734	\$ 245,854					
Flight Systems	110,160	69,994	49,031					
Building Systems Industrial Products for the Automatics	112,900	89,581	96,102					
Industrial Products for the Automotive, Electronics and Other Industries	180,827	156,007	176,027					
General corporate assets, and other	33,861	23,037	24,178					
General corporate assets, and other		20,007	24,170					

674,818

528,353

591,192

Consolidated Summary of Business Segment Financial Data continued

United Technologies Corporation

Geographic Areas	Yea	Years Ended December 31,		
In Thousands of Dollars	1983	1982	1981	
	*************************************	<u> </u>		
Revenues	412.00= 1=2	*** * * * * * * * * * * * * * * * * *	4.0.055.05 0	
United States operations	\$12,035,472	\$11,007,974	\$10,975,653	
International operations:	1 500 019	1 497 406	1 270 200	
Europe Other	1,590,913 $1,465,398$	1,437,496 $1,487,633$	1,379,298 1,676,105	
Eliminations	(422,518)	(355,974)	(363,298)	
Consolidated revenue	\$14,669,265	\$13,577,129	\$13,667,758	
Operation Broth				
Operating Profit United States operations	\$ 665,454	\$ 605,365	\$ 669,064	
International operations:	\$ 000,101	Ψ 000,500	Ψ 000,001	
Europe	112,258	123,118	116,194	
Other	152,477	155,353	$247,\!265$	
Eliminations	5,308	1,041	4,061	
Operating profit	935,497	884,877	1,036,584	
Other income, less other deductions	151,487	139,000	96,839	
Interest expense	(208,573)	(250,886)	(244,839)	
General corporate expenses	(19,170)	(15,267)	(13,169)	
Consolidated income before income taxes	\$ 859,241	\$ 757,724	\$ 875,415	
Identifiable Assets				
United States operations	\$ 6,163,414	\$ 5,641,215	\$ 5,371,182	
International operations:	, , ,	, ,	,	
Europe	1,185,499	1,049,721	954,198	
Other	1,194,040	1,154,153	1,080,566	
General corporate assets, and other	177,106	148,287	149,157	
Consolidated assets	\$ 8,720,059	\$ 7,993,376	\$ 7,555,103	

See accompanying Notes to Consolidated Summary of Business Segment Financial Data

Notes to Consolidated Summary of Business Segment Financial Data

(A) The Corporation and its consolidated subsidiaries design, develop, manufacture and sell high-technology products, classified in four principal industry segments or lines of business in accordance with Financial Accounting Standard No. 14.

Power products are principally aircraft engines and substantial spare parts. Energy process equipment and modified aircraft engines and related equipment for electrical power generation and other applications are also included.

Flight Systems products include helicopters, propellers, rocket motors, and fuel control, environmental, radar, cockpit and integrated display and other airborne and space systems.

Building Systems products include air-conditioning equipment, elevators and escalators, substantial service, maintenance and spare parts, advanced communications systems and integrated building systems and services.

Industrial Products for the Automotive, Electronics and Other Industries include electrical wiring systems, electromechanical and hydraulic devices, paint, fuel injection systems, electric motors, and other products for the automotive industry; controls and control systems for the appliance and related industries; magnet wire and winding machinery for the electric motor, transformer and electromagnetic equipment industries; semiconductor devices for the electronics industry; ink and other chemical specialty products for the printing and other industries; and a variety of wire and cable products.

Activities classified as "Other" consist of a variety of business activities, including the design and manufacture of naval radar, military command and control and computer systems, and radioactivity measurement and gas chromotography instruments.

(B) Revenue by industry segment, and geographic area, includes intersegment sales and transfers between geographic areas. Generally, such sales and transfers are made at prices approximating those which the selling or transferring entity is able to obtain on sales of similar products to unaffiliated customers. Certain domestic transfers are, however, made at inventory cost. These are principally transfers of wire products within the Industrial Products classification.

Revenues include sales under prime contracts and subcontracts to the U.S. Government, for the most part Power and Flight Systems products, as follows:

In Thousands of Dollars	1983	1982	1981
Power	\$2,722,816	\$2,786,509	\$2,542,238
Flight Systems	\$1,832,646	\$1,544,240	\$1,122,658

Revenues from United States operations include export sales of \$2,383,411,000 in 1983, \$2,271,721,000 in 1982 and \$2,636,437,000 in 1981. Export sales to Europe were \$491,000,000, \$539,306,000 and \$706,060,000 of the 1983, 1982 and 1981 amounts, respectively. Export sales include direct sales to commercial customers outside the United States and sales to the U.S. Government, commercial and affiliated customers which are known to be for resale to customers outside the United States.

- (C) Operating profit is total revenue less operating expenses. In determining operating profit, none of the following has been included or deducted: other income, less other deductions; general corporate expenses; interest expense; and income taxes.
- (D) Identifiable assets are those which are specifically identified with the industry segments and geographic areas in which operations are conducted. General corporate assets consist principally of cash and short-term cash investments, and investments in unconsolidated finance subsidiaries and other companies.

Depreciation charges are as follows:

In Thousands of Dollars	1983	1982	1981
Power	\$146,680	\$130,716	\$105,829
Flight Systems	\$ 44,296	\$ 38,165	\$ 31,659
Building Systems	\$ 63,152	\$ 55,399	\$ 55,076
Industrial Products	\$102,245	\$ 87,964	\$ 72,790

- (E) Eliminations made in reconciling industry and geographic area data with the related consolidated amounts include intersegment sales and transfers between geographic areas, unrealized profits in inventory and similar items.
- (F) The Summary of Business Segment Financial Data should be read in conjunction with the other financial statements of the Corporation and notes thereto appearing elsewhere in this Annual Report.

Quarter Ende	d	l
--------------	---	---

In Thousands of Dollars (except per share amounts)	March 31	June 30	September 30	December 31	For the Year
1983 Sales Gross Profit Net Income Preferred Stock Dividend Requirement Earnings Applicable to Common Stock Earnings Per Share:	\$3,535,407 \$ 902,131 \$ 110,075 \$ 16,830 \$ 93,245	\$3,714,109 \$ 983,322 \$ 140,003 \$ 16,813 \$ 123,190	\$3,527,247 \$ 948,287 \$ 121,021 \$ 16,635 \$ 104,386	\$3,892,502 \$1,067,251 \$ 138,074 \$ 16,546 \$ 121,528	\$14,669,265 \$ 3,900,991 \$ 509,173 \$ 66,824 \$ 442,349
Primary Fully Diluted	\$1.71 \$1.63	\$2.23 \$2.05	\$1.88 \$1.77	\$2.12 \$2.03	\$7.94 \$7.48
1982					
Sales	\$3,214,052	\$3,513,636	\$3,306,486	\$3,542,955	\$13,577,129
Gross Profit Income Before Extraordinary Item and Cumulative Effect of Change in	\$ 868,883	\$ 929,562	\$ 883,283	\$ 939,250	\$ 3,620,978
Accounting Principle	\$ 95,518	\$ 105,330	\$ 113,195	\$ 112,831	\$ 426,874
Net Income	\$ 162,139	\$ 145,556	\$ 113,195	\$ 112,831	\$ 533,721
Preferred Stock Dividend Requirement	\$ 18,278	\$ 17,594	\$ 16,854	\$ 16,844	\$ 69,570
Earnings Applicable to Common Stock Per Share of Common Stock: Income Before Extraordinary Item and Cumulative Effect of Change in Accounting Principle:	\$ 143,861	\$ 127,962	\$ 96,341	\$ 95,987	\$ 464,151
Primary	\$1.49	\$1.68	\$1.78	\$1.78	\$6.73
Fully Diluted	\$1.45	\$1.60	\$1.68	\$1.68	\$6.41
Net Income:		•	•	•	•
Primary*	\$2.77	\$2.45	\$1.78	\$1.78	\$8.74*
Fully Diluted*	\$2.46	\$2.21	\$1.68	\$1.68	\$8.01*

Notes: Effective January 1, 1982, the Corporation changed its method of accounting for investment tax credits from the deferral method to the flow-through method as more fully described in Note 2 of Notes to Financial Statements. The cumulative effect of \$66.6 million representing the unamortized portion of prior years' investment tax credit has been included in the quarter ended March 31,1982.

the unamortized portion of prior years' investment tax credit has been included in the quarter ended March 31,1982.

The quarter ended June 30, 1982 includes an extraordinary gain of \$40.2 million resulting from the exchange of cash and 1,919,311 shares of Common Stock of the Corporation for \$165 million principal amount of debentures. See Note 4 of Notes to Financial Statements.

*In 1982, average common shares outstanding for the year were greater than such shares in the first and second quarters, when the cumulative effect of the accounting change and the extraordinary gain were reported. As a result, earnings per share in 1982, for the individual quarters, do not equal the per share amounts for the year.

Directors

Board of Directors

Stillman B. Brown
Executive Vice President – Finance
and Administration

Robert J. Carlson President

Antonia Handler Chayes Partner, Csaplar and Bok (Law Firm)

Robert F. Dee Chairman of the Board, SmithKline Beckman Corporation (Pharmaceuticals)

Charles W. Duncan, Jr.
President, Warren-King Companies
(Group of Energy-Related Companies)

Hubert Faure Senior Executive Vice President — Building Systems

T. Mitchell Ford Chairman, President and Director, Emhart Corporation (Diversified Manufacturer)

Harry J. Gray Chairman and Chief Executive Officer

Pehr G. Gyllenhammar Chairman and Chief Executive Officer AB Volvo (Automobiles, Trucks, Buses, Oil Trading and Prospecting)

Robert H. Malott Chairman of the Board and Chief Executive Officer, FMC Corporation (Machinery and Chemicals)

K. Rupert Murdoch Chief Executive Officer The News Corporation Limited (International Media Group)

John S. Reed Vice Chairman Citicorp and Citibank, N.A. (Financial Institution) William E. Simon Chairman Wesray Corporation (Private Investments)

Darwin E. Smith Chairman of the Board and Chief Executive Officer Kimberty-Clark Corporation (Consumer Paper Products)

Richard S. Smith Vice Chairman and Director National Intergroup, Inc. (Metal Products)

William I. Spencer Retired President and Director Citicorp and Citibank, N.A. (Financial Institution)

Robert L. Sproull President University of Rochester

Jacqueline G. Wexler President National Conference of Christians and Jews

Committees

Executive Committee Harry J. Gray, Chairman T. Mitchell Ford Richard S. Smith William I. Spencer

Audit Review Committee Richard S. Smith, Chairman Antonia Handler Chayes Charles W. Duncan, Jr. Pehr G. Gyllenhammar Darwin E. Smith Jacqueline G. Wexler

Committee on Compensation and Organization T. Mitchell Ford, Chairman Robert F. Dee Darwin E. Smith Robert L. Sproull Jacqueline G. Wexler

Nominating Committee
William I. Spencer, Chairman
T. Mitchell Ford
Harry J. Gray
Robert H. Malott
William E. Simon
Darwin E. Smith

Pension Committee
Robert L. Sproull, Chairman
Robert F. Dee
Harry J. Gray
William E. Simon
Richard S. Smith
William I. Spencer

Public Issues Review
Committee
Jacqueline G. Wexler, Chairman
Antonia Handler Chayes
Charles W. Duncan, Jr.
Pehr G. Gyllenhammar
Robert H. Malott
William E. Simon
Robert L. Sproull

Operating and Policy
Committee
Harry J. Gray, Chairman
Stillman B. Brown
Robert J. Carlson
Raymond D'Argenio
Hubert Faure
Edward W. Large
Latham L. Allison
Clark MacGregor
Sidney F. McKenna
Russell G. Meyerand, Jr.
Francis L. Murphy,
Associate Member

Officers

Management

Harry J. Gray Chairman and Chief Executive Officer

Robert J. Carlson *President*

Hubert Faure Senior Executive Vice President — Building Systems

Stillman B. Brown
Executive Vice President - Finance
and Administration

Edward W. Large Executive Vice President – Legal and Corporate Affairs

Richard J. Coar Senior Vice President - Power Group

Robert F. Daniell Senior Vice President – Defense Systems Group Chief Executive Officer, Sikorsky Aircraft

Raymond D'Argenio Senior Vice President – Communications

Richard F. Gamble Senior Vice President – Controls Group

Edward M. Irving Senior Vice President — Industrial Systems Group Chairman and Chief Executive Officer, Inmont

Clark MacGregor Senior Vice President – External Affairs

Sidney F. McKenna Senior Vice President – Human Resources and Organization

Francis L. Murphy Senior Vice President and Counsel to the Chairman

James A. O'Connor Group Vice President — Essex Group Chairman and Chief Executive Officer, Essex

Edward J. Rapetti Group Vice President — Automotive Group; President and Chief Executive Officer, Ambac

Latham L. Allison
Vice President – Strategic Planning

Joseph A. Biernat Vice President – Treasurer

J. Thomas Bouchard Vice President - Industrial Relations Thomas A. Drohan
Vice President – Public Relations

William J. Evans Vice President

Beverly C. Lannquist Vice President – Investor Relations

Martin R. Lewis, Jr. Vice President and Secretary

Russell G. Meyerand, Jr. Vice President - Technology

Charles B. Preston Vice President – Controller

Dale W. Van Winkle Vice President

Ralph A. Weller Vice President

Hugh E. Witt Vice President – Government Liaison

Irving B. Yoskowitz Vice President and General Counsel Bill L. Aishman President, Pacific Area Operations, Otis

Robert F. Allen
President and Chief Executive
Officer, Carrier

Anthony D. Autorino Chairman and Chief Executive Officer, United Technologies Building Systems Company

Selwyn D. Berson Executive Vice President, Pratt & Whitney Group

John M. Bruce President and Chief Operating Officer, Essex

Lawrence W. Clarkson President, Commercial Products Division, Pratt & Whitney Group

George A. L. David President, North American Operations, Otis

Leonard L. DeSantis
President and Chief Operating Officer,
Inmont

Harold L. Ergott, Jr.

President and Chief Executive
Officer, Mostek

Francois Jaulin President and Chief Operating Officer, Otis

John Lovkay, Jr.
President, Hamilton Standard
Division

Frank W. McAbee, Jr.

President and Chief Operating Officer,
United Technologies Building Systems
Company

T. Stephen Melvin
President, Manufacturing Division,
Pratt & Whitney Group

Irwin Mendelson President, Pratt & Whitney Engineering Division, Pratt & Whitney Group

Herman A. Michelson President, Norden Systems

William C. Missimer, Jr. Executive Vice President, Pratt & Whitney Group

William F. Paul President and Chief Operating Officer, Sikorsky Aircraft

Joe R. Phillips
President, Government Products
Division, Pratt & Whitney Group

Francisco Ramos President, Latin American Operations, Otis

William L. Sammons President, North American Operations, Carrier

Elvie L. Smith
President and Chief Executive Officer,
Pratt & Whitney Canada Inc.

Terry D. Stinson President, Elliott

Jean-Pierre van Rooy President, Carrier International

Arthur E. Wegner
President, Pratt & Whitney Group

William A. Wilson President, European and Transcontinental Operations, Otis Transfer Agent

For the Common Stock and for the \$2.55 and \$4.50 Preferred Stocks

Morgan Guaranty Trust Company of New York 30 West Broadway New York, New York 10015

Transfer Agent

For the \$8.00 Preferred Stock*

The Chase Manhattan Bank, N.A. 1 New York Plaza New York, New York 10081

Registrar For the Common Stock

The Bank of New York 90 Washington Street New York, New York 10015

Registrar For the Preferred Stock

Manufacturers Hanover Trust Company 450 West 33rd Street New York, New York 10015

Stock Listing

Common
New York, London, Paris,
Frankfurt, Geneva, Lausanne,
Basle, Zurich, Brussels and
Amsterdam Stock Exchanges
\$8.00 Preferred
New York Stock Exchange
\$2.55 Preferred
New York Stock Exchange

Ticker Symbol

Common \$8.00 Preferred \$2.55 Preferred UTX UTX pr A UTX pr D

Newspaper Stock Listing
Common UnTech
\$8.00 Preferred UTch pf 8
\$2.55 Preferred UTch pf 2.55

Corporate Office

United Technologies Building Hartford, CT 06101 Telephone (203) 728-7000

This annual report is sent to shareowners in advance of the proxy statement for the annual meeting to be held at 11 a.m., April 30, 1984, in Hartford, Connecticut. The proxy statement will be sent to holders of Common Stock, \$2.55 Preferred Stock and \$4.50 Preferred Stock on or about March 16, 1984, at which time proxies for the meeting will be requested.

Shareowners may obtain a copy of the 1983 United Technologies 10-K report filed with the Securities and **Exchange Commission** by writing to Martin R. Lewis, Jr., vice president and secretary, United Technologies Corporation. United Technologies Building, Hartford, Connecticut 06101. Shareowners may obtain a list of United Technologies' charitable contributions for 1983 by writing to Mr. Lewis at the above address.

Dividends

Dividends are usually declared the first month of each calendar quarter and are usually paid on the 10th day of March, June, September and December.

The dividend disbursing agent for the Common Stock and the \$2.55 and \$4.50 Preferred Stocks is:

Morgan Guaranty Trust Company of New York Stock Transfer Department 30 West Broadway New York, New York 10015

Dividend inquiries: (212) 587-6469 Transfer inquiries: (212) 587-6372

The dividend disbursing agent for the \$8.00 Preferred Stock is:

The Chase Manhattan Bank, N.A. Shareholder Services 1 New York Plaza New York, New York 10081 Inquiries: (212) 676-3812 Power

Pratt & Whitney Elliott Fuel Cell Operations International Support Systems

Building Systems

Carrier Air Conditioning Otis Elevator Essex Building Systems Company

Defense

Sikorsky Norden Systems

Industrial Inmont Automotive

Controls Hamilton Standard

Mostek

Research Center

Microelectronics Center

^{*} The \$8.00 Preferred Stock was called for redemption on April 2, 1984. Notices were mailed to holders of \$8.00 Preferred Stock on or about February 2, 1984.



High technology is the common denominator of all we do.